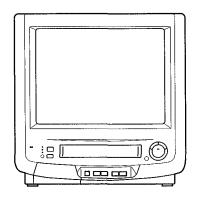
KV-20/13VM30/31 **RM-Y138/W**

SERVICE MANUAL



US Model

KV-20VM30

chassis No. SCC- J90A-A

KV-13VM30

chassis No. SCC- J90B-A

KV-13VM31

chassis No. SCC- J90C-A

Canadian Model

KV-20VM30

chassis No. SCC-J89A-A

KV-13VM30

chassis No. SCC-J89B-A

MODELS OF THE SAME SERIES

KV-13VM30/31

48 x 72 mm

50 Hz-20kHz

KV-20VM30

SPECIFICATIONS

Television system American TV standard, NTSC COLOR

Channel coverage

VHF: 2-13 UHF: 14-69 **CABLE TV: 1-125**

Picture tube Trinitron® Tube

20-inch picture measured diagonally 21-inch picture tube measured diagonally 13-inch picture measured diagonally

14-inch picture tube measured diagonally

 75Ω external antenna terminal for Antenna

VHF/UHF

Video In(phono jack) Input

2 each (Front/Rear): 1 Vp-p, 75-ohms

unbalanced negative sync Audio In(phono jack)

2 each (Front/Rear): 400 mVrms (100%

modulation) Impedance. 47 k Ω

Headphone Jack Output

SP: 33.35 mm/sec. EP. 11.12 mm/sec.

Maximum

Tape Speed

Recording/playback 8 hours in EP mode

Speaker Size

Audio frequency

response

Power requirements 120V AC, 60Hz

Power consumption

86W (KV-13VM30/31) 108W (KV-20VM30)

Fast-forward and

rewind time

Approx. 4min 30sec (T-120 Tape)

Dimensions

(w/h/d)

13V; 15" x 16" x 151/5" 382 x 407 x 411 mm

20V, 201/2" x 201/2" x 183/5" 522 x 522 x 474 mm

Weight

13V, Net 13 76kg (33 3lbs) Gross. 15.62Kg (34.4lbs)

20V, Net: 26.1 kg (58 lbs) Gross: 30 Kg (66.1 lbs)

Supplied accessories Remote Commander RM-Y138/W (1)

with 1 AA size (R6) battery

Antenna Adapter (1)

Design and specifications are subject to change without notice





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(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, DUE TO LIVE CHASSIS THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND \triangle MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFEOPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED

(ATTENTION)

ARRES AVOIR DECONECTE LE CAP DE L'ANODE, COURT CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHEÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DÉPANNAGE

LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á

ATTENTION AUX COMPOSANTS RELATIFS ALA SÉCURITÉ!!

SAFETY CHECK-OUT

(US Model only)

After correcting the original service problem, perform the following safety checks before relasing the set to the customer

- Check the area of your repair for unsoldered or poorly soldered connections Check the entire board surface for solder splashes and bridges.
- 2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
- 4 Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair Point them out to the customer and recommned their replacement
- 5 Look for parts which, though functioning, show obvious signs of deterioration Point them out to the customer and recommend their replacement
- Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer
- Check the condition of the monopole antenna (if any).
 Make sure the end is not broken off and has the plastic cap on it.
 Point out the danger of impalement on a broken antenna to

the customer, and recommend the antenna's replacement.

- Check the B+ and HV to see they are at the values specified.
 Make sure your instruments are accurate; be suspicious of
- Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage Check leakage as described below

your HV meter if sets always have low HV

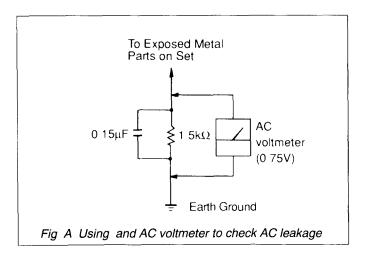
LEAKAGE TEST

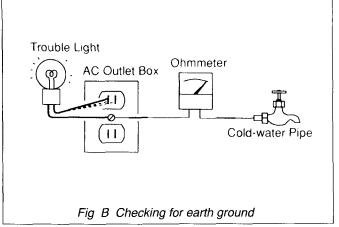
The AC leakage from any exposed metal parts to earth ground and from all exposed metal parts to any exposed metal parts having a return to chassis, must not exceed 0.5 mA(500 microampers) Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers instructions to use these instruments
- 2. A battery-operated AC milliammeter The Data Precision 245 digital multimeter is suitable for this job
- 3. Measuring the voltage drop across a resistory by means of a VOM or battery-operated AC voltmeter The "limit" indication is 0 75V, so analog meters must have an accurate low-voltage scale The Simpson 250 and Sanwa SH-63TRD are examples of a passive VOM that is suitable Nearly all battery operated digital multimeters that have a 2V AC range are suitable (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

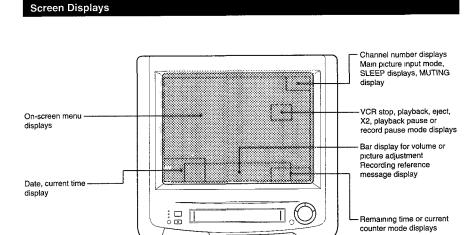
A cold-water pipe is guaranteed earth ground, the cover plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a coldwater pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the line, the lamp shojuld light at normal brilliance if the screw is a ground potential (See Fig. B)





LINE IN jacks

QUICK TIMER REC button

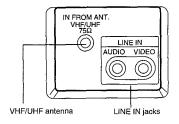


(0 00 00

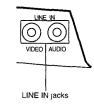
LOCATING THE CONTROLS

Rear and Front Panel

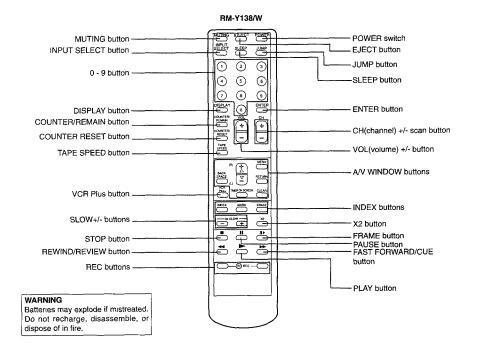
Rear Panel



• Front Door Inside



Remote Commander



. 07

Preface

Although you can use either an indoor or outdoor antenna with the VIDEO TV, an outdoor antenna will provide you with better picture quality. You can receive cable TV by connecting a cable supplied by your local cable company.

Connecting VHF, UHF or VHF/UHF Combination Antenna, or CATV Cable

75-ohm coaxial cable (round)

Check your antenna cable type and prepare the end of the cable using the F-type connector.

Attach an F-type connector (not supplied).



7mm(1/4inch) 10mm(3/8inch) F-type connector







6

Plug the connector into the VHF/UHF terminal at the rear of the VIDEO TV.



Most combination antennas are equipped with a signal splitter. Remove the splitter and attach the appropriate connector.

300-ohm twin-lead cable (flat)

Check your antenna cable type and prepare the end of the cable using the 300-ohm twin-lead cable.

Attach the supplied antenna connector.

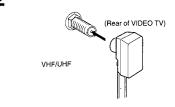


Loosen both screws on the connector with screwdriver.

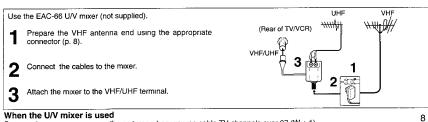


Preface

Plug the connector into the VHF/UHF terminal at the rear of the VIDEO TV.



Connecting Both VHF and UHF Antennas

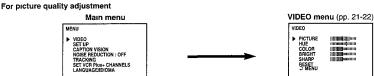


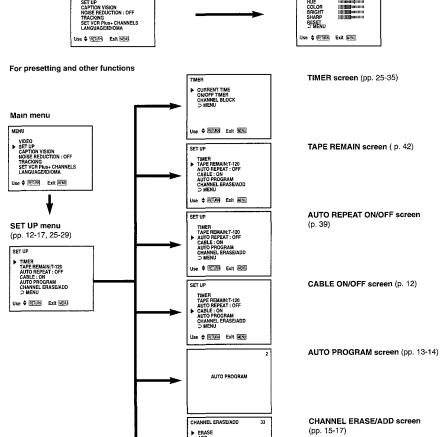
Snow and noise may appear in the pictures when viewing cable TV channels over 37 (W + 1).

For better picture quality, we would recommend you to connect an outdoor antenna.

1-3. USING THE ON-SCREEN MENUS

The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.





Use & RETURN Exit WOW



USING THE ON-SCREEN MENUS

For closed caption setting **CAPTION VISION menu** Main menu CAPTION VISION screen (p. 23) CAPTION VISION VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF THACKING SET YOR Plus+ CHANNELS LANGUAGE/IDIOMA Ø/TEXT OFF Jse ♦ RETURN Exit WEN. Use \$ RETURN Exit (PEAU For noise reduction function NOISE REDUCTION menu Main menu NOISE REDUCTION screen (p. 24) MENU VIDEO SET UP CAPTION VISION NOISE REDUCTION: ON TRACKING SET VCR PIUS+ CHANNELS LANGUAGEADIOMA VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET YCR Plust CHANNELS LANGUAGE/IDIOMA Use ♦ RETURN Exit WERE Use ♦ RETURN Exit WENU For tracking adjustment function TRACKING menu Main menu TRACKING screen (p. 41) TRACKING VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR PIUS+ CHANNELS LANGUAGE/IDIOMA AUTO : ON TRACKING ADJUST Use CRETURN Exit MENT Use \$ RETURN Exit WEAD For VCR Plus+ CHANNELS setting SET VCR Plus+ CHANNELS menu Main menu SET VCR Plus+ CHANNELS screen SET VCR Plus+ CHANNELS (p. 44-46) VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR Plus+ CHANNELS LANGUAGE/IDIOMA GUIDE CH TV CH Push 0 - 9 keys to set Program GUIDE CH Or. Push RETURN to see Use \$ RETURN Exit WEND VCR Plus+ CHANNEL LIST For on screen language selection function LANGUAGE SELECTION menu Main menu To select the LANGUAGE/IDIOMA MENU LANGUAGE VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR PIUS+ CHANNELS LANGUAGE/IDIOMA Press △ + or ▽ - to select the desired language mode. And, press RETURN.

Navigating Through the Menus

Use the buttons on the remote commander.

To display the main menu Press MENU.

Use \$ RETURN Exit WEND

 \sim

To return to the normal screen Press MENU on the Remote Commander. To return to the previous menu Press △+ or ▽- to select MENU. Then press RETURN. To return to the main menu

Repeat the above, until you reach the

Use \$ RETURN Exit MENU

Note

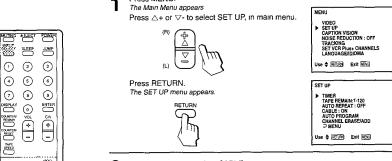
The menus disappear automatically if you do not press a button within 60 seconds.

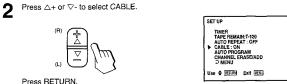
Preface Preface

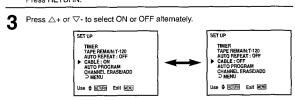
1-4. TURNING THE CABLE MODE ON OR OFF

All of the controls are on the Remote Commander.

If you have cable connected to your VIDEO TV (p. 8-9) follow the steps below to turn the cable connection on or off. CABLE is preset to OFF when you use your VIDEO TV for the first time. Turn CABLE to OFF to preset or watch VHF or UHF channels.







Press RETURN.

The setting is completed.



Note

If the VIDEO TV is in LINE mode, you cannot select CABLE. Repeatedly press INPUT SELECT to change to TV mode.

① (2) **①** (5) 7 (8) COUNTERV RESET FEED **⊙**₫**♦** BACK SPACE S 85 INDEX MARK ETIASE TO TO **"** * * * —@≈

RM-Y138/W

To return to the normal screen Press MENU.

Presetting TV Channels Automatically

""" ""

INPUT SLEEP JUMP

0 0 0

0 0

0 0

(II)

Perform auto programming during the day rather than late at night, when some channels may not be broadcasting.

Press POWER on the VIDEO TV or the Remote Commander to turn the VIDEO TV on



Using the Menu, select cable off to receive VHF/UHF channel. Select cable on to receive cable stations.

(Follow the steps in "Turning the Cable Mode On or Off", p. 12.)





VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Pluse CHANNELS
LANGUAGE/IDIOMA Use \$ SETURN Exit WEN.

Press △+ or ▽- to select SET UP.



SET VCR Plus+ CHANNELS LANGUAGE/IDIDMA

se \$ ETURN Exit (EDIL)

SLEEP JUMP 3 1 2 4 5 6 0 ₿ 9 DISPLAY
DISPLAY
SERVICE
SERVIC ⊙ ₹ • • • ENTER SACK SPACE STATE S 100EX 4447 5745E -*** * ***

RM-Y138/W

Receivable channels for this TV VHF: 2-13

UHF: 14-69 Cable: 1-125

To select TV channels without presetting

To return to the normal screen Press MENU.

To erase unnecessary channels, or to add channels that could not be preset automatically because their signal was too weak, follow the steps in "Erasing Unnecessary Channels CHANNEL ERASE" and "Presetting Only Desired Channels-CHANNEL ADD" (pp. 15-17).

Press RETURN. The SET UP menu appears.



TIMER
TAPE REMAIN:T-120
AUTO REPEAT: OFF
CABLE: ON
AUTO PROGRAM
CHANNEL ERASE/ADD
DMENU

SET UP

Use ♦ (RETURN) Exit (VENU)

If the VIDEO TV is in LINE mode, you cannot select AUTO PROGRAM. Press INPUT SELECT to change to TV mode.

Press △+ or ▽- to select AUTO PROGRAM.



SET UP

Use \$ RETURN Exit WEND

Press RETURN.



AUTO PROGRAM

"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the TV's memory.

When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

RM-Y138/W

Press the CH +/- button to select the channel you want to erase. For example, to erase channel 8, press CH + or - until 8 appears.





Press MENU. The main menu appears.



VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR PILLS+ CHANNELS
LANGUAGE/IDIOMA Use ♦ RETURN Exit MENU

Press △+ or ▽- to select SET UP



Press RETURN. The SET UP menu appears.



MENU VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Plus+ CHANNELS
LANGUAGE/IDIOMA Use \$ RETURN Exit WENT



Jse \$ <u>RETURN</u> Exit <u>WENU</u>

RM-Y138/W

SLEEP

INDEX CO

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8

-*** *** $\stackrel{*}{\circ}$

○ - 6 *** - ○

6 (5)

وفتن

ERASE

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① 2 (3)

4

0 (8) (9)

SEE OF SEE

Press △+ or ▽- to select CHANNEL ERASE/ADD



SET UP TIMER
TAPE REMAIN:T-120
AUTO REPEAT: OFF
CABLE: ON
AUTO PROGRAM
CHANNEL ERASE/ADD
DMENU Use & RETURN Exit (MEMU) To return to the normal screen Press MENU.

Press RETURN.

The CHANNEL ERASE/ADD screen appears, and the cursor points to ERASE.



CHANNEL ERASE/ADD ERASE ADD DMENU Select the channel Use ♦ ÆTURN Exit WEND

Note

If the VIDEO TV is in LINE mode, you cannot select CHANNEL ERASE/ADD. Press INPUT SELECT to change to TV mode.

Press RETURN. A "-" sign appears in front of the channel number display showing that the channel is erased from the channel scan memory.



CHANNEL ERASE/ADD ERASE ADD > DMENU Select the channel
Use \$ RETURN Exit WENT

Press MENU.



The next time you press the CH +/- buttons, channel 8 will be skipped.

To erase other channels Repeat steps 1-6.

RM-Y138/W

MUTING & EJECT POWER

INPUT SLEEP JUMP

3

6

9

ENTER

0 2

4 6

O S DISPLAY O COUNTRY VOL.

IA. W.C. SPACE SPA

NOEX MARIE ERASE

* 6 6

15

Preface

Preface

16

10

RM-Y138/W

Presetting Only Desired Channels - CHANNEL ADD

Use this feature to add channels one at a time to the channel scan memory.

Press 0-9 to select the channel you want to add. For example, to add channel 25, Press 2, 5 and ENTER.



2 - 4 (Follow steps 2-4 in "Erasing Unnecessary Channels-CHANNEL ERASE," pp. 15-16)

Note

If the TV is in LINE mode, you cannot select CHANNEL ERASE/ADD. Press INPUT SELECT to change to TV mode.

5 Press △+ or ▽- to select ADD.



CHANNEL ERASE/ADD 33
ERASE
ADD
DMENU

Select the channel
Use \$ COMMON Exit Well

Press RETURN

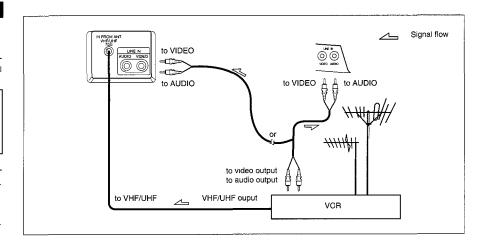
A "+" sign appears in front of the channel number display showing that the channel is added to the channel scan memory.





6 Press MENU.

To add other channels
Repeat steps 1-6.



- Remove the antenna cable from the VIDEO TV Antenna terminal. Connect the antenna cable to the antenna terminal of the other Video/Audio source (ex. Video recorder). Then connect a coaxial cable from the VHF output terminal back to the antenna terminal of the VUDEO TV.
- To use your VIDEO TV to monitor an audio/video source (such as another VCR, a Camcorder or a Laser Disc Player), connect the audio/video source output jacks to the AUDIO/VIDEO IN jacks on the rear panel or front door of the VIDEO TV.

Then select LINE IN using the PLAY ON on the front door.

Notes

- . Press PLAY ON on the front door of the VIDEO TV so that
- LINE^o±appears on the screen.
- To return to TV mode, repeatedly press INPUT SELECT on the VIDEO TV or on the Remote Commander so that a channel number appears on the screen.
- For operating instructions, refer to the instruction manual furnished with the VCR.
- If the picture or sound is affected, move the VCR away from the VIDEO TV.

- 11 -

1-7. WATCHING TV PROGRAMS

1-8. USING CONVENIENT FEATURES



SLEEP JUMP

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3

333

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MEH/3

SACTURES.

TMENOHSCHEDI CAEAR

HOCK MARK EARSE

G & Č

RM-Y138/W

-0 -0

(B) (B) (B)

8 6 8

DISPLAY
COUNTER
COUNTER
COUNTER
RESET
TAY
SHED

Press POWER on the VIDEO TV or the Remote Commander to turn the TV on.



2 Turn the cable mode on or off to select the type of channel you want to watch, VHF/UHF or cable TV.

(Follow the steps in "Turning the Cable Mode On or Off," p.12.)

If "LINE" is displayed on the screen, press INPUT SELECT on the Remote Commander so that the channel number appears.

Select a channel in one of the following two ways:

To scan the preset channels* in numerical sequence Press CH +/-







* For more information on presetting channels, see pp. 13-17.

To select a channel directly

Press 0-9.

For example, to select channel 14, press 1 and 4.

You don't have to press ENTER after having pressed the desired channel number. The channel is directly selected if you do not press ENTER after 3 seconds.

But press ENTER to select a channel quickly.



4

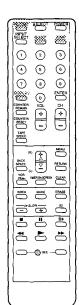
Press VOL +/- to adjust the volume.

Press VOL + to increase the volume. Press VOL - to decrease the volume.



To turn off the TV

Press POWER on the TV or the Remote Commander again.



RM-Y138/W

Muting the Sound - MUTING

Press MUTING.

The display "MUTING" will appear on the screen.

To restore the sound Press MUTING again. MUTING

Keeping the Displays On-Screen - DISPLAY

If AUTO CLOCK has been set when you turn the VIDEO TV on, the display will appear for about 3 seconds as shown right.



To display the channel

Press DISPLAY.

All the existing displays appear: channel number, date, time, VCR operating mode and tape counter.

To cancel the display

Press DISPLAY again. The display will disappear.



Setting the Sleep Timer - SLEEP

The sleep timer turns off the TV automatically after the amount of time you select.

Press SLEEP

Each time you press SLEEP, the time increments 30, 60, 90 and OFF mode appear in sequence.



 SLEEP	OFF
SLEEP	30
SLEEP	60
 SLEEP	90

The SLEEP display appears about one minute before the TV turns off.

To cancel the setting

Press SLEEP untill OFF mode appears.

The "SLEEP OFF" display appears for about three seconds.

OR

Turn the TV off.

The sleep timer setting is cancelled.

Switching Quickly Between Two Channels - JUMP

Press JUMP once to recall the channel you were watching previously. Press JUMP again to switch back. Use this feature to keep track of two programs alternately.



19 20
Preface Preface

0 2 3

\$ (a) \(\frac{1}{2}\)

*** * ***

RM-Y138/W

(6)

0 0

7 0 0

OCONTIEN VOI. C1

You can adjust the picture for each input mode (TV mode, LINE) by pressing INPUT SELECT to select the input mode before making the adjustments.

These adjustments are retained in memory even when you turn off the TV until you change the adjustments again.

Press MENU.

The main menu appears, and the cursor points to VIDEO.

MENU

MENU

VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Plus-CHANNELS
LANGUAGE/DIOMA

Use \$ REUR! Exit WEN!

Press RETURN.
The VIDEO menu appears.



VIDEO

PICTURE
INITIATION INITIATIATION INITIATION INITIATION INITIATION INITIATION INITIATION INI

3 Press △+ or ▽- to select the item you want to adjust. For example, to adjust the picture color, select COLOR.



VIDEO
PICTURE
HUE
COLOR
BRIGHINGHIMIGHUM
SHEAFT
SHE

Press RETURN.
The adjustment bar appears.





Press △+ or ▽- to make the adjustment.





Increase color intensity



COLOR

Decrease color intensity

Press RETURN.

The new setting appears in the VIDEO menu.





To adjust other items Repeat steps 3-4.

[Press 1 to	Prese A + to
PICTURE	decrease picture contrast with soft color	increase picture contrast with vivid color
HUE	make skin tones become purplish	make skin tones become greenish
COLOR	decrease color intensity	increase color intensity
BRIGHT	darken the picture	brighten the picture
SHARP	soften the picture	sharpen the picture

To return to the normal screen Press MENU.

To restore the factory (mid-level) setting Go to the VIDEO menu and select RESET by pressing △+ or ▽- Then press RETURN. All the settings except for PICTURE will be restored to mid-level settings.

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0 0 0

COUNTERV VOL

SHOOT STEEL CLEAR CLEAR

5 5

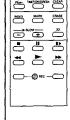
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RM-Y138/W

Press MENU. The main menu appears. VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Pluss CHANNELS
LANGUAGE/IDHOMA Use ♦ RETURN Exit MENU

Press △+ or ▽- to select CAPTION VISION. Then press RETURN. The CAPTION VISION screen appears.







Press \triangle + or ∇ - to select closed caption mode.

Select CC1 or CC2 to view Captions. A Caption is a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.)

Select TEXT1 or TEXT2 to view Text.

using the full to full television screen.

It is usually not related to the program.

Text is information that is presented



Use ♦ RETURNS Exit NAMED

CAPTION VISION

©/TEXT OFF ©1 ©2 TEXT1 TEXT2 > MENU

Select CC/TEXT OFF if you do not want to use the CAPTION VISION mode.

CAPTION VISION ©/TEXT OFF ©1 ©2 TEXT1 TEXT2 ⊃ MENU Use ♦ RETURN Exit MERNI

Press RETURN. The Setting is completed.

Note

Captions may appear with a white box or another error instead of a certain word. Poor reception of TV programs can also cause errors in Closed Caption.

SLEEP ZUME 2 ① 3 0 (5) 6 0 (8) 9 0 0 5 1 ENTER). *• NOTE WAS ERASE (a**a ∆ ----**5 5 5**

RM-Y138/W

You can reduce the picture noise on the screen in VCR playback mode.

Press MENU. The main menu appears, and the cursor points to VIDEO.



VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR PIUS+ CHANNELS
LANGUAGENDIOMA Use \$ RETURN Exit MENU

Press △+ or ▽- to select NOISE REDUCTION.



MENU VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR PIUS+ CHANNELS LANGUAGE/IDIOMA Use ♦ RETURN Exit MENU

Press RETURN, then △+ or ∇- to select ON.





VIDEO SET UP CAPTION VISION NOISE REDUCTION : ON Use \$ RETURN Exit WENG

Press RETURN. The picture noise is reduced.



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Preface

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Preface

NPUT. SLEEP JUMP 0 (2) 3 **(4)** (5) 6 (8) 0 (9) DISPLAY ENTER 0 COUNTERV REMAIN COUNTERV RESET TAPE SPEED _ ₩ ě . S <u></u> 288 NEROHSCHEN CLEAR NOEX MWK ERASE ₫" *** >** $\stackrel{*}{\bigcirc}$

RM-Y138/W

Notes

- · The clock cannot be set automatically if you don't receive a channel that carries a time signal in your area. If so, set the clock manually (pp28-29).
- · If there are only a few channels in your area that carry time signals, setting the clock automatically may take up to about 30 minutes. If nothing happens even after you wait about 30 minutes, set the clock manually.
- · The menu disappears automatically if you don't proceed for more than one minute.

Setting the Clock - AUTO CLOCK SET

Before you use the timer feature for recording program, you need to set the current time and date.

Some TV and cable channels have started to transmit time signals with their broadcasts. Your VIDEO TV can pick up this time signal to automatically set the clock. After completing the steps below, when you turn off the VIDEO TV, it will automatically search for a channel that carnes a time signal and set the clock. The Auto Clock Set feature only works if a channel in your area is broadcasting a time signal. If broadcasters in your area are not yet sending time signals, set the time manually (PP28 - 29). Clock setting is necessarry also to use ON/OFF TIMER, CHANNEL BLOCK, Timer Recording and VCR Plus Recording.

Press MENU. VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Plus+ CHANNELS
LANGUAGE/DIOMA The main menu appears. Use \$ RETURN Exit WENU

In main menu, press \triangle + or ∇ - to select SET UP Then press RETURN. SET UP The SET UP screen appears. TIMER
TAPE REMAIN:T-120
AUTO REPEAT: OFF
CABLE: OFF
AUTO PROGRAM
CHANNEL ERASE/ADD
DMENU

Use & RETURN Exit MENU Press \triangle + or ∇ - to select TIMER. Press RETURN. CURRENT TIME ON/OFF TIMER CHANNEL BLOCK D MENU The TIMER screen appears. Use \$ RETURN Exit MENU

Press △+ or ▽- to select CURRENT TIME. Press RETURN. The CURRENT TIME screen appears.







Press RETURN then select AUTO by using △+ or ▽-Press RETURN again. The Auto Clock Set screen appears







Press RETURN then select FULL AUTO by using △+ or ▽-Press RETURN again. RETURN





When clock data service is available, the clock is set automatically with leaving the TV off

To activate the Auto Clock Set function, turn the TV off. The VIDEO TV automatically sets the clock.

The VIDEO TV automatically searches for a channel that carries a time signal and sets your time zone and daylight saving time (if applicable). If your clock sets, but displays the wrong time zone or daylight saving time, you can adjust these settings by following the steps below.

If the clock is not activated

Follow steps 1 to 5 above.

Press RETURN then select OPTIONS by using △+ or ▽-Press RETURN again.

The CURRENT TIME SET CH screen appears.





CURRENT TIME SET CH MANUAL [CH---] Use ♦ PETURN Exit MENU

Press RETURN, then press △+ or ▽- to select AUTO or MANUAL.

If you select AUTO:

The VIDEO TV automatically searches for a channel that carries a time signal.

Use \$ RETURN Exit (VENU)

If you select MANUAL.

Set a channel that carries a time signal using the number buttons. Use this option if you know that channel. Most PBS member stations broadcast a time signal. For the fastest response, set the VIDEO TV to your local PBS station.

CURRENT TIME SET CH AUTO MANUAL

CURRENT TIME SET CH

[CH---]

AUTO MANUAL

Push 0-9 keys to set CURRENT TIME for clock Then push RETURN

Use ♦ RENNS Exit VENU

25

Preface

Preface

SELECT SLEEP

(8)

) (*) ENTER

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(4) (5) (6)

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DISPLAY

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INDEX MARK ERASE

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RM-Y138/W

JUMP

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USING THE TIMER-ACTIVATED FUNCTIONS

4 Pre

Press RETURN.

The YOUR TIME ZONE AND DAYLIGHT SAVING TIME



YOUR TIME ZONE AND DAYLIGHT SAVING TIME > AUTO MANUAL

Use ♦ RETURN Exit WEND

5 Pre

Press RETURN, then press △+ or ▽- to select AUTO or MANUAL.

If you select AUTO:

The VIDEO TV automatically sets your time zone and daylight saving time (if applicable).

ATLANTIC
EASTERN
CENTRAL
MOUNTAIN
PACIFIC
ALASKA
HAWAII

Use \$ \$\text{ELEM}\$ Exit \$\text{URA}\$

YOUR TIME ZONE

If you select MANUAL.

- Press RETURN, then set the time zone of your area using △+ or ▽-
- 2. Press RETURN, then select STANDARD TIME or DAYLIGHT SAVING TIME using \triangle + or ∇ -

DAYLIGHT SAVING TIME

STANDARD TIME DAYLIGHT SAVING TIME

Use \$ FETURO Exit WEN

6

Press RETURN.



To activate the Auto Clock Set function, turn the TV off.

Notes

- If AUTO CLOCK has been set when you turn the VIDEO TV on, the display will appear as shown right. When the display does not appear as shown right even though AUTO CLOCK has been set: using the Manual Clock Set stops the automatic channel search when your set is power off. If the Auto Clock Set feature is not in use, the channel search is not performed when your set is power off.
- If you set the clock manually, the display will appear as shown right.

11:30 AM AUTO CLOCK

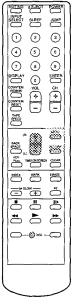
12:00 AM 3/11 FRI

Notes

- Select STANDARD, if the DAYLIGHT SAVING TIME is not performed in your
- When you connect another VCR to the VHF/UHF antenna terminal, if VCR's tape is transmitted wrong time signal, your VIDEO TV automatically sets the clock by the time signal of the tape.

Not to set the clock by the time signal of

Turn your VIDEO TV off after having tunned VCR off or Set the clock manually on your VIDEO TV.



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To change or correct the setting before completing it

Press BACK SPACE to return to the item to be erased.

Setting the Clock - MANUAL CLOCK SET

EXAMPLE

Set the time to 11:30AM, Sunday on the 25th of February, 1996.

In main menu, press △+ or ▽- to select SET UP Then press RETURN. The SET UP screen appears.

Press △+ or ▽- to select TIMER.
Press RETURN.
The TIMER screen appears.

Press △+ or ▽- to select CURRENT TIME.
Press RETURN.
The CURRENT TIME screen appears.

Press RETURN then select MANUAL by using △+ or ▽Press RETURN.

The Manual Clock Set screen appears.





CURRENT TIME

-/-/MENU

Use \$ RETIEN Exit LEXT

Press RETURN.
"Set the month" appears on the screen.
The month will appear in red.



Press △+ or ▽- to set the month.
Each time you press △+ or ▽- the month changes in sequence.



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Preface

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To display the time Press DISPLAY.

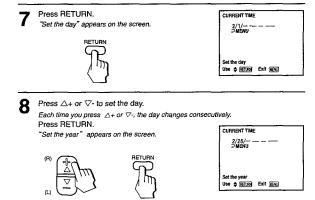
To return to the normal screen Press MENU.

Notes

. The internal clock of this VIDEO TV operates on a 12-hour cycle.

> 12:00 AM stands for midnight. 12:00 PM stands for noon.

- · All the settings including CLOCK will be erased if you unplug the VIDEO TV or a power failure occurs. Reset the current time by following steps 1-11.
- . You cannot change the clock during Timer Recording. To change the clock, stop the recording.



Press \triangle + or ∇ - to set the year.

Each time you press △+ or ▽-, the year changes in sequence and the day of the week automatically changes. CURRENT TIME

Press RETURN.

"Set the time" appears on the screen.

2/25/96 SUN 12:00AM Sot the time Use ♦ RETURN Exit WEND

10 Press \triangle + or ∇ - to set the hour.

Each time you press △+ or ▽-, the hour changes in sequence starting with "12:00AM." CURRENT TIME

Press RETURN.

2/25/96 SUN 11:00AM Set the time Use ♦ FIETURN Exit NEW

Press △+ or ▽- to set the minute. Each time you press △+ or ▽-, the minute changes in sequence.

Press RETURN.

The setting is completed and the clock starts.

CURRENT TIME 2/25/96 SUN 11:00AM Use ♦ RETURN Exit NEW!



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Setting the ON/OFF TIMER

With this function you can set your favorite program to appear on the screen at the

EXAMPLE: Set the timer to turn on the VIDEO TV every Monday through Friday at 3:15 PM for 2 hours, on channel 21.

in main menu, press △+ or ▽- to select SET UP Then press RETURN. The SET UP screen appears.

Press △+ or ▽- to select TIMER. Press RETURN. The TIMER screen appears



Press △+ or ▽- to select ON/OFF TIMER. Press RETURN. The ON/OFF TIMER screen appears.

RETURN

ON/OFF TIMER EVERY SUN-SAT 12:00AM -h CH-

Use & RETURN Exit WENT

Note

If the ON/OFF TIMER display does not function, the current time has not been set and you cannot select ON/OFF TIMER. To set the clock, see "Setting the Clock-AUTO CLOCK SET/MANUAL CLOCK SET," PP 25-29.

Press RETURN. ""Set the day" appears on the screen. "EVERY SUN-SAT" will be changed in red.

ON/OFF TIMER EVERY SUN-SAT 12:00AM -h CH--⊃MENU Set the day
Use \$ RETURN Exit NAME.

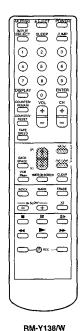
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USING THE TIMER-ACTIVATED FUNCTIONS



Press \triangle + or ∇ - to set the day. Each time you press \triangle + or ∇ -, the days of the week change as shown in Fig. 1 (page 32).

Then press RETURN.

"Set the time" appears on the screen.





ON/OFF TIMES EVERY MON-FRI 12:00AM -h CH--D MENU Set the time
Use \$ STURN Exit WENU

Press \triangle + or ∇ - to set the hour that you want the TIMER to start. Each time you press \triangle + or ∇ -, the hour changes in sequence.

Then press RETURN.





EVERY MON-FRI 3:00PM -h CH---D MENU Use \$ RETURN Exit MENU

Press \triangle + or ∇ - to set the minutes. Each time you press △+ or ▽-, the minutes change in sequence.

Then press RETURN.

"Set the duration" appears on the screen.





EVERY MON-FRI 3:15PM 1h CH-Set the duration
Use \$ RETURN Exit PERM

Press △+ or ▽- to set the duration of time. Each time you press \triangle + or ∇ -, the duration changes from "1" to "9" in sequence.

Then press RETURN.

"Select the channel" appears on the screen.







Press \triangle + or ∇ - to set the channel that you want the TV to tune in. Each time you press \triangle + or ∇ -, the channel number changes in sequence.



Select the channel Use \$ RETURN Exit WENU

Press RETURN. The setting is completed.



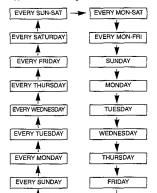
ON/OFF TIMES EVERY MON-FRI 3:15PM 2h CH21 > MENU Use ♦ RETURN Exit WEND

Notes

- · One minute before the timer goes off, the "TV will turn off" will appear on the
- If you have not set the clock correctly, the ON/OFF TIMER will not operate at the proper time. To set the clock, see "Setting the Clock-AUTO CLOCK SET/MANUAL CLOCK SET," pp 25-29.
- All the settings including ON/OFF TIMER will be erased if you unplug the VIDEO TV or a power failure occurs. Reset the TIMER by following steps 1-9.

Selecting the day(s) of the week

When you press A+, the days of the week appear in the following order.



SATURDAY

(♥ -: reverse order)

Cancelling the ON/OFF TIMER

Select the ON/OFF TIMER screen (Refer to pp. 30 - 32). Press RETURN. "EVERY SUN-SAT" will appear in red.

Press BACK SPACE to erase the ON/OFF TIMER.



ON/OFF TIMER EVERY SUN-SAT 12:00AM -h CH-Use ♦ RETURN Exit WENT

To Change or Correct Setting the ON/OFF TIMER

Before completing it

Press BACK SPACE to return to the item to be changed or corrected. When it is displayed in red, set it again by using the △+ or ▽-

After completing it

Select the ON/OFF TIMER screen.

Then, press RETURN to return to the item to be changed or corrected.

When it is displayed in red, set it again by using the △+ or ▽-

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Note

To return to the normal screen Press MENU.

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SLEEP JUMP

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REGULATION
RE) 0 7 1

TAPE

Then press RETURN. The SET UP screen appears.

Press △+ or ▽- to select TIMER. Press RETURN.

The TIMER screen appears







Press \triangle + or ∇ - to select CHANNEL BLOCK. Then press RETURN. The CHANNEL BLOCK screen appears.

"Select a program" appears on the screen.





CHANNEL BLOCK 2EVERY SUN-SAT 12:00AM -h CH---⊃MENU Select a program Use ♦ ÆTURN Exit VENU

Press RETURN again. "Set the day" appears on the screen.



HANNEL BLOCK 1EVERY SUN-SAT 12:00AM -h CH---2EVERY SUN-SAT 12:00AM -h CH---DMENU Set the day Use \$ RETURN Exit WENU

POWER SLEEP JUMP ① ② 3 4 5 6 8 9 DISPLAY
COUNTER
REMAN
COUNTER
RESET
TAPE
SPEED) | o | v | -ENTER * 8

RM-Y138/W

Press \triangle + or ∇ - to set the day.

Each time you press \triangle + or ∇ -, the days of the week change as shown in Fig. 1 (page

Then press RETURN.

"Set the time" appears on the screen.





CHANNEL BLOCK 1EVERY MON-FRI 12:00AM -h CH--

Set the time Use \$ RETURN Exit (MENU)

Press \triangle + or ∇ - to set the hour that you want to start blocking time. Each time you press \triangle + or ∇ -, the hour changes in sequence.

Then press RETURN.





CHANNEL BLOCK 1EVERY MON-FRI 3:00PM -h CH---2EVERY SUN-SAT 12:00PM -h CH---⊃MENU

Setthe time Use ♦ PETURN Exit MENU

Press △+ or ▽- to set the minutes. Each time you press \triangle + or ∇ -, the minutes change in sequence.

Then press RETURN.

"Set the duration" appears on the screen.





CHANNEL BLOCK 1EVERY MON-FRI 3:15PM 1h CH-

Set the duration
Use ♦ RETURN Exit MENU

Press △+ or ▽- to set the duration of time. Each time you press △+ or ∇-, the duration changes from "1" to "12" in sequence.

Then press RETURN.

"Select the channel" appears on the screen.



CHANNEL BLOCK 1EVERY MON-FRI 3:15PM 2h CH--2EVERY SUN-SAT 12:00AM -h CH---D MENU

Select the channel
Use ♦ RETURN Exit (MENA)

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Press \triangle + or ∇ - to set the channel that you want the TV to block out.

Each time you press \triangle + or ∇ -, the channel number changes in sequence.



Press RETURN. The setting is completed.



CHANNEL BLOCK 1EVERY MON-FRI 3:15PM 2h CH21 2EVERY SUN-SAT 12:00AM -h CH-⊃MENU

Select the channel Use ♦ ®ETIN Exit WON

CHANNEL BLOCK 1EVERY MON-FRI 3:15PM 2h CH21 2EVERY SUN-SAT 12:00AM -h CH— ⊃MENU

Jse \$ RETURN Exit WENU

10 To set another program, repeat steps 1 to 3, press \triangle + or ∇ - to select the next channel block and repeat steps 4 to 9.

Cancelling the CHANNEL BLOCK

Select the CHANNEL BLOCK screen. (Refer to page 33.) Press RETURN. EVERY SUN-SAT will appear in red.

Press BACK SPACE to erase the CHANNEL BLOCK.



CHANNEL BLOCK 1EVERY SUN-SAT 12:00AM -h CH-

Select a program Use \$ RETURN Exit (MENU)

To Change or Correct Setting the CHANNEL BLOCK

Before completing it

Press BACK SPACE to return to the item to be changed or corrected. When it is displayed in red, set it again by using the \triangle + or ∇ -

After completing it

Select the CHANNEL BLOCK screen.

Then, press RETURN to return to the item to be changed or corrected. When it is displayed in red, set it again by using the △+ or ▽-

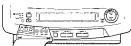
Note

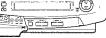
To return to the normal screen

- If you have not set the clock correctly, the CHANNEL BLOCK will not operate at the proper time. To set the clock, see "Setting the Clock-Auto Clock Set/Manual Clock Set," pp 25-29.
- · All the settings including CHANNEL BLOCK will be erased if you unplug the VIDEO TV or a power failure occurs. Reset the TIMER by following steps 1-9.

Notes

- · If you select the blocked channel during the time you set, the message BLOCKED appears and the picture is blocked and the sound is muted.
- · Recording is possible while the channel block is being activated.
- If the CHANNEL BLOCK and ON/OFF TIMER settings are overlapped, only the CHANNEL BLOCK function operates.





SLEEP JUMP

When you press PLAY ON during the TV or VCR playback mode Your VIDEO TV turns to LINE in mode.

Press the PLAY ON(Green Color button) inside the front door.

You can use PLAY ON on your VIDEO TV to monitor quickly other Video/Audio

Connect an AV cable(Video camera, Game machine, etc) to LiNE IN tacks on

Although your VIDEO TV is in TV mode or VCR play back mode, it turns to

To return to TV mode during play on mode Press INPUT SELECT or CH +/-

"LINE" appears on the screen.

sources (such as a camcorder, a video game, etc).

the front door or rear panel of your VIDEO TV.

LINE IN mode directly by pressing PLAY ON.

When you press PLAY ON twice during power on VIDEO TV turns off.

When you press PLAY ON during power off

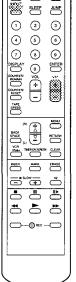
Your VIDEO TV turns on and turns to LINE IN mode directly. When you press this button again, your VIDEO TV will be turned off.

When you press PLAY ON during recording or LINE in mode, The PLAY ON button does not operate.

Notes

1-13. USING THE PLAY ON FUNCTIONS

- . When the LINE IN jacks inside the front door and on the rear panel are connected to external equipment at the same time, the LINE IN jacks inside the front door are prior to them on the rear panel.
- If you press INPUT SELECT or CH+/- while your VIDEO TV is in play on mode by pressing PLAY ON, the VIDEO TV will be not turned off by pressing this button again. To turn it off, press POWER.



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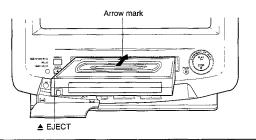
Preface

Preface

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Inserting a Video Cassette

Insert a video cassette with the arrow mark facing upwards.



Gently press the center of the front side of the cassette until the mechanism draws it into the compartment.
When the cassette has been inserted, the [Image] / STAND BY indicator lights and the VIDEO TV turns on automatically.

Note

When you insert a cassette without a safety tab, playback starts automatically (AUTO PLAYBACK function).

Ejecting the cassette

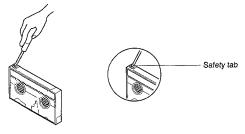
Press EJECT ▲.

You can also eject the cassette when the power is off.

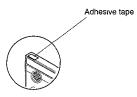
Protecting your cassette against accidental erasure

The cassette is provided with a safety tab to protect against accidental recording. Break off the safety tab with a screwdriver or other suitable tool.

If the safety tab is removed, the cassette will be ejected when you try to record on the cassette.



To record on a cassette with the safety tab broken off, simply cover the tab hole with adhesive tape.



Maximum recording time of a tape

The quality of tape you use greatly affects record/playback quality and the life of the VIDEO TV. Use only cassette tapes that have the official VHS logo.

High-grade tapes give the best results, especially at the EP speed. They also have a better oxide coating that helps prevent dirty video heads. Although T-160 tapes offer the longest recording time, they contain thinner tape that is more likely to stretch or cause tape jams. We suggest that you use T-120 or shorter tapes.

Recording in the SP or EP mode is possible with this unit. When recording, select the desired recording mode (SP or EP) with TAPE SPEED on the Commander. During playback, the unit automatically detects the recording format, and then plays back the tape in the appropriate mode.

The following chart shows the maximum recording times for T-60, T-120 and T-160 tapes at the recording speeds as below.

Speed	T-60	T-120	T-160
SP	1 Hour	2 Hours	2 2/3 Hours
	(60 Minutes)	(120 Minutes)	(160 Minutes)
EP	3 Hours	6 Hours	8 Hours
	(180 Minutes)	(360 Minutes)	(480 Minutes)

Playing back a video tape in the LP mode is possible but recording in this mode is not possible with this unit.

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SP 0:00:00

SLEEP JUMP

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MENU

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RM-Y138/W

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REMAIN
COUNTERV
REMAIN
TABLE
TA

Playing Back a Prerecorded Cassette Tape

Insert a prerecorded cassette into the tape compartment. The VIDEO TV automatically turns on.

Note

When playing back rental tapes, select NOISE REDUCTION:ON in main menu image detail

If playback does not start, press PLAY ▶ The tape plays back at the speed at which was recorded.

To stop playback

Press STOP ■.

To stop playback for a moment

Press PAUSE II.

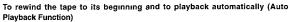
II appears on the screen and image will stop on

To resume playback, press PAUSE ■ or PLAY ▶

appears on the screen.

When the tape is played back to the end

The tape is automatically rewound to the beginning (auto rewind). The power remains on.



In the main menu, press △+ or ▽- to select SET UP during playback or stop mode and then press RETURN. And press \triangle + or ∇ - to select AUTO REPEAT and then press RETURN. By using △+ or ▽-, select AUTO REPEAT to ON.

Variable Speed Playback

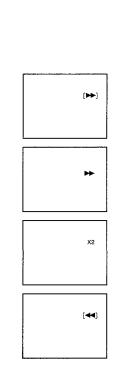
You can enjoy playing back pictures in variable speeds on the VCR.

Still Picture

During playback mode, press PAUSE ■ To resume normal playback, press PLAY ▶ or PAUSE II.

Notes

- . No sound accompanies the picture, which may be unstable or have video "noise" in it. This is normal.
- . If the VCR is left in the pause mode for more than about 5 minutes, the VIDEO TV will be in playback mode automatically.



To see a slow motion (Slow Picture)

Press -SLOW+ during playing back.

To advance the picture frame by frame (Frame Picture)

Press FRAME III during Still Picture.

To advance the tape rapidly

While the tape is being played back, pressing FAST FORWARD ▶ will move the tape forward at high speed so you can see the picture and choose where to stop. When you do this, [►►] appears on the screen.

If you release the button, the VCR will return to normal playback.

When tape is not being played back and the VCR is in the stop mode, pressing FAST FORWARD► winds the tape forward at very high speed without displaying the picture

When you do this, >> appears on the screen.

You can stop the forward running of the tape at any time by pressing STOP ■.

If during the operation, the tape rewinds forward to the end, the machine will automatically stop and then rewind the tape back to the beginning again.

By pressing X2, you can now run through a tape at twice normal speed to find the exact place you want. Revert to normal speed by pressing PLAY▶

To rewind the tape rapidly

play the tape backwards to find a particular spot. When you do this, [◄◄] appears on the screen and the tape will be rewound at very high speed.

At the end, STOP appears on the screen and invite you to press PLAY >

Viewing TV Programs During Tape Playback

While a tape is being played, you can switch to watching TV broadcasts. Press STOP ■.

The VIDEO TV returns to normal TV reception mode.

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II▶

Preface

Preface

PLAYING BACK A VIDEO TAPE

Playing Back a Tape Recorded on Another VCR

When playing back a tape recorded on another VCR, there might be some picture noise.

Tracking ensures that the tape is correctly aligned with the playback head. It only works in the "playback" mode and its principle purpose is to minimize picture shake and what is called "noise" (fuzzy lines across the picture during playback and still picture).

It is adjusted either automatically or manually.

Automatic tracking adjustment function

When playback starts, the auto tracking automatically adjusts the picture. "AUTO TRACKING" flashes for 5 seconds.

The automatic tracking control is activated in the following conditions:

- . When the cassette is inserted for the first time.
- When the recording mode on the playback tape is switched from SP to EP and back again.
- . When the picture is distorted by scratches on the tape.
- When TRACKING AUTO:ON is selected in the Tracking menu after the picture is adjusted automatically.

If auto tracking does not work, the tracking was probably last adjusted manually.

Adjusting the tracking manually during playback

When the playback picture proves to have streaks or snow during normal playback, Still picture or Slow picture, adjust the picture manually using the Tracking menu. Press either \triangle + or ∇ - to select TRACKING ADJUST in Tracking menu to obtain the best possible picture. Press RETURN and adjust by pressing \triangle + or ∇ - When playing back a tape recorded on another VCR, the tracking condition is automatically adjusted on this VCR.

Notes

- Auto tracking adjustment may be impossible when the recording condition of the tape is noor.
- During auto tracking adjustment, streaks or noise may appear.

Note

For seeing the remaining tape time, first check the tape mode.

If you want to see the remaining tape time in T-120, press RETURN then △+ or ▽- until T-120 appears in TAPE REMAIN screen. For OTHERS, press the button until OTHERS appears.

Using COUNTER/REMAIN

To display the counter, press COUNTER /REMAIN once

The tape counter shows the tape travel time in hours, minutes and seconds during recording or playback.

SP 0:00:00

To see the remaining tape time during recording or playback, press COUNTER/REMAIN twice.

The remaining tape time appears with "REM."



Using Counter Memory Function

The counter memory makes it easy to return to a particular spot on the tape after recording or playback. The tape stops when the counter reaches SP 0:00:00. This feature is especially helpful when editing a recording.

Press COUNTER/REMAIN to see the counter.

Start recording or playback, and press COUNTER RESET at the point you want to return to.

The counter displays SP 0:00:00.

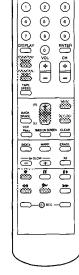
SP 0:00:00

Press STOP • when you finish recording or playing the tape.

Press REWIND/REVIEW ←.

The tape stops at SP 0:00:00.

Press PLAY ▶ to play the tape.



SLEEP JUMP

RM-Y138/W

JUMP

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(3) (3) (3)

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COUNTERV REMAIN COUNTERV RESSET

(8) (8)

> ⊗ ENTER

VCR TMERON SCHEIN CLEAR

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Caution

Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws. Also, use of this recorder with cable television transmission and/or program owner.

Insert a cassette with the safety tab. The VIDEO TV turns on automatically (Auto power on).

Select the channel to be recorded with CHANNEL +/- or 0-9 buttons.

Select the recording tape speed, SP or EP, with TAPE SPEED.

Press the two REC buttons on the Commander at the same time, or the REC button on the unit. The REC indicator lights

To stop recording

Press STOP ■.

Temporarily to stop recording at a particular point

Press PAUSE II to eliminate unwanted station breaks or program material while recording a TV program.

REC II appears on the screen.

To resume recording, press PAUSE II again.

When the recording pause mode lasts for more than approximately 5 minutes, the unit enters the stop mode.

Note

When the tape reaches its end

The tape rewinds to the beginning. The power will remain on.

Recording a Program Without Watching the TV

Turn off the power of the TV.

There will be no interference with the recording.

You cannot watch another program while recording one program.

VCR Plus+ is a feature in SONY VCRs that simplifies the task of programming the VIDEO TV to make timer recordings.

How VCR Plus+ works

Whenever you want to record a TV program, all you need to do is look up the program's "PlusCode," a number assigned to each program that's published in the TV section of most newspapers, cable TV listings, and even TV GUIDE magagine. Then, just enter the PlusCode of the program you want and the VIDEO TV is automatically programmed to record that show. It's that simple. With VCR Plus+, you no longer have to go through a lengthy and often repetitive procedure when you set start and stop times, channel numbers, and dates. All this information is automatically sent to your VIDEO TV when you enter the program's PlusCode.

Setting Up VCR Plus +

Setting up your VIDEO TV involves coordinating the TV channel number(the number you turn to on your set to watch a program) with the guide channel number (the number that's assigned to that channel in your program guide). To get the guide channel numbers, find the "Channel Line-up Chart" in the program guide for your area that features VCR PlusCodes. It usually looks like the example on page 45.

For each channel your VIDEO TV receives, use the Channel Line-up Chart to check that the channel numbers match. For example, if HBO is listed in the Channel Lineup Chart on channel 33, and your VIDEO TV receives HBO on channel 15, you need to coordinate these numbers using the following procedure. For channels in which the numbers are the same (for example, if your VIDEO TV receives HBO on channel 33, and the guide channel number is 33), you can skip this procedure.

In main menu, press △+ or ▽- to select SET VCR Plus+ CHANNELS.



MENU VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Pluss CHANNELS

Jse ♦ PETURNI Exit WENU

Press RETURN

The SET VCR Plus+ Channels screen appears and the GUIDE CH is highlighted.



SET VCR Plus+ CHANNELS GUIDE CH TV CH Push 0 - 9 keys to set Program GUIDE CH Or Push RETURN to see VCR Plus+ CHANNEL LIST

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Preface

Preface

SLEEP

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INDEX MAPK ERASE

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RM-Y138/W

(3)

ENTER

CH ◆

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7

COUNTERV RESET TAPE

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SETTING UP VCR PLUS +

Press 0-9 to enter the channel number assigned in the program guide and press ENTER. The TV CH is highlighted. SET VCR Plus+ CHANNELS

(1) (2) (3) **(** (5) (6) 7 8 9 (i)

GUIDE CH TV CH Push 0 - 9 keys to set your TV CH Then push ENTER

Press 0-9 to enter the actual number on your VIDEO TV channel.

2 3 **4 9 6** 8 9 0

SET VCR Plus+ CHANNELS GUIDE CH TV CH Push 0 - 9 keys to set program GUIDE CH Or Bush RETURN to see VCR Plus+ CHANNEL LIST

SET VCR Plus+ CHANNELS GUIDE CH TV CH Push 0 - 9 keys to set your TV CH Or Push RETURN to see VCR Plus+ CHANNEL LIST

Repeat steps 3-4 for each channel whose numbers don't match.

When you have set all channels, press RETURN to confirm your channel settings.



VCR Plus+ CHANNEL LIST **GUIDE TV** GUIDE TV 33 - 18 59 - 3 61 - 47 77 - 35 90 - 8

Example of "PlusCode"



Example of "Channel Line-up Chart"

Exam	pie or Chamilei Line-u	p Chart
		\sim
CABLE	CABLE TV	VCR Plus+ GUIDE CH
16	American Movie Classics	35
17	BRV Brave (program grid only)	54
20	CNN Cable News Network	42
21	CSP C-SPAN	28
22	DIS The Disney Change	17 79
25	OSC The Discovery Charmel	S 37
34	ESPN 🥿	/7 34
35	The Family Changel	47
5	HBO Home Box Office	33
27	Lifetime	46
29	MAX Cinemex	45
30	Music Televistor	48
31	NIK Nickelodelon	38
38	SC Spetrs-Gharmel	59
39	SCA Soots Chagnel America	70
45	SHO Showtime	41
17	TBS TBS SuperStation	43
44	The Movie Channel	58
49	TNN The Nashville Network	49
50	Tumer Network Television	52
51	USA Network	44
_		$\overline{}$

Note

Press MENU.

SLEEP JUMP

2

(I ♦ § (O) DISPLAY

> WENT

MARK

TO TO

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O PEC -

RM-Y138/W

. Insert a tape with its safetly tab in place.

Turn on your VIDEO TV. When using a

Make sure the tape is longer than the total

. Check that the clock is set correctly.

When the VIDEO TV is turned off.

· The timer will not accept setting in the

When you select Daily for a Saturday and

When you select Daily or Weekly for a

When you enter the PlusCode of a

preset, "6 PROGRAMS HAVE ALREADY

program more than seven days ahead.

program that has already ended. · If the 6 programs have already been

BEEN SET" appears on the screen.

Before you start

recording time.

Notes

following cases:

Sunday program

cable box, turn it on.

(3)

883

CH →

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[④ (5) 6

0 (8) (9)

COUNTER REMAIN COUNTER RESET

BACK SPACE

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RECORDING TV PROGRAMS USING VCR PLUS +

You can preset up to six programs within a one month time frame.

Press VCR Plus+

Recording TV Programs

1/6 SAT TAPE SPEED Enter Program's PlusCode using 0-9 keys To change tape speed push TAPE SPEED

Press 0-9 to enter the Plus Code of the program you want to preset. If you've made a mistake, press CLEAR and enter

the PlusCode again. (1) (2) (3) **4 6 6**





TAPE SPEED [26854-1 After entering PlusCode, pusj RETURN If you make a mistake push CLEAR

Press TAPE SPEED to select the tape speed, SP, EP or AT.



TAPE SPEED PlusCode [26854---] Enter Program's PlusCode using 0-9 keys To change tape speed push TAPE SPEED

[26854] [EP]
RECORDING TIME
DATE START STOP CH
1/25THU 4:30PM 6:00PM 03EP

TAPE SPEED

Press RETURN.

The recording information appears on the screen. Check that the information is correct If it is not, press CLEAR to cancel.

To preset another timer setting, repeat steps 1 to 4.

Notes

· When you press TIMER ON SCREEN after having checked the recording information, the TIMER SET/ CHECK menu appears with the recording information

of program presetting using VCR Plus+.

To set timer, push POWER To cancel, Push CLEAR

· Once, Daily or Weekly Setting Press RETURN to return curser to the item presetting in TIMER SET/CHECK menu (Then

refer to the step 3 on page 48 and Daily/Weekly Recording on page 49.).

Press POWER to turn off the VIDEO TV.

The TIMER REC indicator lights up and the VIDEO TV stands by for recording. When using a cable box, leave it on. The VIDEO TV automatically turns on, records the program and turns off.

To stop recording while recording - Press STOP . To use the VIDEO TV before recording begins

Press POWER to turn on the VIDEO TV. The TIMER REC indicator goes off and the VIDEO TV is ready for use. After using the VIDEO TV, turn it off again to turn on the TIMER REC indicator. When using a cable box, leave it on. Remember to reset the VIDEO TV to stand by for recording before the time you've set the VIDEO TV to start recording, or the timer setting will be cancelled.

· You cannot set VCR Plus+ in the following cases:

To return to the normal screen.

Preface

MUTHIG RELECT POWER

INPUT SLEEP JUMP

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MENU

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DISPLAY

COUNTERI REMAIN COUNTERI RESET

SEE SEE

Before you begin, check the following points.

- . The date and clock must be set correctly. (See "Setting the Clock -AUTO/MANUAL CLOCK SET" on pp. 25-29.)
- . Make sure that the cassette tape is long enough to record all the programs.
- . Make sure that the safety tab on the cassette is not broken off.

Recording from today to one month later

If today is August 31st, you can set the timer to record a program broadcast between today and September 30 (for 31 days). If today is January 31st, you can set the timer to record a program broadcast between today and February 28th (for 29days). A leap year is automatically considered.

Setting the Timer

Example: Suppose you want to record a program broadcast on channel 26 from 9:00 PM on Wednesday January 10 in EP mode. Note that 12:00 AM is midnight and 12:00 PM is noon.

Press TIMER ON SCREEN. The TIMER SET/CHECK screen appears.





Press RETURN.

Make sure that today's date changes in red.

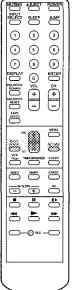
If not, reset the correct time. See "Setting the Clock - AUTO/MANUAL CLOCK SET" on pp. 25-29.



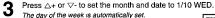


Note

During timer recording, [67] / STAND BY indicator lights.



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Press RETURN to change the hours section under "START" in red then △+ or ∇- until 9 PM appears.



Use ♦ RETURN Exit (VEW)

Press RETURN to change the minute section under "START" in red then △+ or ∇-until 00 appears





Use \$ RETURN Exit (WENU)

Press RETURN.

The hours section under "STOP" changes in red. Set the turn-off time referring to steps 4 and 5.



TIMER SET/CHECK 1/6 SAT DATE START STOP CH 1/10Web 9:00PM 10:55PM -Use ♦ RETURN Exit (VENU)

Press RETURN to change the CH position in red then △+ or ▽-until 26



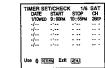




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RETURN





Note

The AT (AUTO SPEED) mode starts recording at the SP speed, but if it determines there isn't enough tape left to complete the programmed recording, it switches to the EP speed.

Press RETURN to store the setting.



۰	DATE 1/10wed	START 9:00PM	STOP 10:55PM	26E
•	-/			
	-/		-:	
	-/			
	-/			
	-/			

10 After you finish programming, press POWER to turn off the VIDEO TV. The TIMER REC indicator lights.

To change or correct the setting before completing it Press BACK SPACE to return to the item to be changed.

To preset another program

Move the cursor to the second line after step 9 and repeat steps 2 to 10.

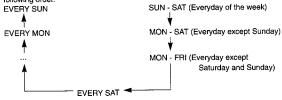
Daily/Weekly Recording

You can preset the timer-activated recording to the same program everyday of the week (Daily recording), or one day of the week(Weekly recording).

Follow steps 1 through 2 in "Setting the Timer" on page 47.

You can select the following programs.

Each time you press \bigtriangledown -, the indication under "DATE" on screen changes in the following order.



Notes

The following messages under each case appear on the screen:

"PLEASE PUT IN A RECORDABLE
 CASSETTE" ---



When switched to stand-by mode for timer recording, if a cassette is not inserted or a cassette without safety tab is inserted.

 "PLEASE PUSH POWER OFF TO SET TIMER"---

When the VIDEO TV is still turned on before the timer recording starts or when SLEEP OFF time and TIMER REC START overlap.

- "PLEASE STOP THE TAPE"--When TIMER ON SCREEN is pressed at
 the same time the tape is being played
 back
- "VCR IS RECORDING"--When PLAY, FAST FORWARD, REWIND
 /REVIEW, EJECT, CH +/-, 0~9 buttons,
 INPUT SELECT, JUMP or MENU is
 pressed at the same time the timer
 recording is being done.
- "TIMER REC STARTS IN 5 MINUTES" -- 5 minutes before timer recording starts.
- "PLEASE SET THE CLOCK FIRST" --When TIMER ON SCREEN is pressed in
 the condition the current time is not set.
- "VCR is TIMER RECORDING" --When STOP button is pressed during recording.
 The recording is not stopped.
- . To stop the Timer Recording
- Press TIMER ON SCREEN
 TIMER SET/CHECK screen appears.
- 2. Press △+ or ▽- to select TIMER REC PROGRAM
- 3. Press CLEAR
- The program is cleared and the timer recording stops.



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When Preset Timer Recordings Overlap

If the turn-on time of two programs are the same

The program listed first on the TIMER SET/CHECK display has priority over the other programs. The timer recording of lower priority programs will be done from the point after program 1 is finished.

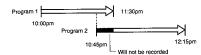


If the recording start time of program 2 is the same as the recording end time of program 1



If the recording start time of program 2 comes before recording of program 1 is over

The recording of program 2 will begin after program 1 is finished.



Note

If a power interruption occurs

- If a power interruption lasting less than approximately three hours occurs while the VCR is waiting for the preset time, the VIDEO TV re-enter the timer recording standby mode.
- If a power interruption lasting more than approximately three hours occurs before a timer recording, the memory clears. Reset the date and time for timer recording.
- If a power interruption lasting less than approximately three hours occurs during a timer recording the VIDEO TV starts recording again.

If the recording start time of the program is same as the time set with ON/OFF TIMER

 The ON/OFF TIMER has priority over the timer recording so that the timer recording will not start. In this case, set the recording start time earlier than ON/OFF TIMER and the timer recording will start.

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Preface Preface

Press TIMER ON SCREEN. The TIMER SET/CHECK screen appears.

TIMER ON SCREEN

TIMER SET/CHECK 1/6 SAT
DATE START STOP CH
1/10wED 9:00P4 10:5599 25EP
1/11TH 1:009 2:559 10e
1/1279 1:009 2:559 25e
1/1279 1:009 2:579 25e Use **♦ RETURN** Exit WEN

Press TIMER ON SCREEN again to return to the original screen.

Changing or Cancelling the Timer Settings

The timer settings can be changed or cancelled by referring to the TIMER SET/CHECK display.

Press TIMER ON SCREEN. TIMER SET/CHECK screen appears

27



Use ♦ RETURN Exit WEND

Press △+ or ▽- to move the cursor to the program you wish to change or cancel





To change it, flash the item to be changed by pressing BACK SPACE and make the required changes by pressing \triangle + or ∇ -





To cancel it, move the cursor to the item to be cancelled by pressing \triangle + or ∇ then press CLEAR.

Press TIMER ON SCREEN to return to the original screen.

QUICK TIMER RECORDING

Notes

The TIMER SET/CHECK display

- · When a recording is set for only one day, that setting is erased from the TIMER SET/CHECK display after the recording is
- · The timer recording programs by using VCR Plus+ is also displayed in the TIMER SET/CHECK on-screen menu.



 To extend the Quick Timer Recording time, press QUICK TIMER REC. to

advance the recording time in 30-minute

. To clear the Quick Timer Recording

setting, press QUICK TIMER REC until

· If the tape runs out during Quick Timer Recording, recording will stop and the power goes off. The tape will not rewind

· If a power interruption occurs during

Quick Timer Recording, recording will

stop and the power goes off. If the power interruption lasts less than three hours

and the power is restored before the

recording end time, recording will start

Notes

time length is 0:00

again from that point.

automatically.

This function is convenient when, for example, you want to set the VCR to start recording immediately without going through the whole timer setting procedure.

Notes

- . Make sure that the clock is set correctly before you activate Quick Timer Recording.
- During Quick Timer Recording, you cannot change the channel on the VIDEO TV.

Insert a cassette. The VIDEO TV automatically turns on.

Press INPUT SELECT so that a channel number appears. Press TAPE SPEED to select the recording speed, SP or EP

Select the desired channel number with the 0-9 buttons or CHANNEL +/-If you try to select the Cable TV channel, first set CABLE to ON in SET UP

Press QUICK TIMER REC on the front panel.

QUICK TIMER REC QUICK TIMER

QUICK TIMER 0:30

Each time you press QUICK TIMER REC, the time length advances in 30minute increments up to 8 hours.

> QUICK TIMER REC

After you select the desired time length, Quick Timer Recording starts from

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1-16. INDEX FUNCTION

SLEEP JUMP

9

) # (*)

MENU

1 2 3

(4) (5) (6)

8

ENTER

BACK SPACE S

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8 8

INDEX signal marks on the tape let you scan through the start of different programs or search for a specific section of tape.

Marking INDEX Signals

Automatic INDEX mark

An INDEX signal is automatically marked at the beginning of recording.



Manual INDEX mark

INDEX signals can be marked at any desired point during any recording or normal playback.

Press INDEX once. INDEX 00 appears.



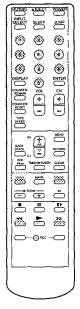


Then press MARK at the point where you want to mark INDEX signal. INDEX MARK appears on the screen.



Notes

- · Leave an interval of more than 2 minutes between INDEX signals when marking them one after the other so that the VCR can detect them correctly.
- · While an INDEX signal is being marked during playback, the recorded sound will not be heard, but it will not be erased.
- · You cannot mark an INDEX signal in the following cases:
- On a tape without safety tab.
- On an unrecorded portion of a tape.
- Immediately before a point on the tape where the tape speed changes.



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Playing Back From the INDEX Point

The beginning of each program can be found and played back by using the INDEX

Insert a cassette with INDEX signals.

Press INDEX once during playback. INDEX 00 appears on the screen.





Press either FAST FORWARD► or REWIND/REVIEW to start the INDEX scan. The tape rewinds or rapidly advances to the next marked signal.

The tape plays back for about 5 seconds, then rewinds or rapidly advances to the next INDEX signal. Each time INDEX signal is detected and playback begins, the INDEX scan number (INDEX SCAN 04) appears.

INDEX SCAN04

When the desired program is detected, press PLAY▶ Playback starts from that point.

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Locating the Desired Program (INDEX Search)

A particular program can be located and played back by designating how many INDEX signals ahead or behind that program is from the current position.

Insert a cassette with INDEX signals.

Press INDEX. INDEX 00 appears





Using the 0-9 buttons, enter the number of INDEX signals you want to skip. For example, if the tape is at INDEX 02 and you want to locate INDEX 05, press 0 3.

You can select maximum location by INDEX 99.

INDEX SEARCH03 appears on the screen. When the desired signal is found, playback begins







Note

While INDEX signal is being erased, the

recorded sound is temporarily muted.

Erasing INDEX Signals

You can erase unnecessary INDEX signals.

Press INDEX during STOP mode. INDEX 00 appears.

Press ERASE. INDEX ERASE appears on the screen.





Press either FAST FORWARD► or REWIND/REVIEW ◀ The first subsequent INDEX signal is erased and the tape begins playback.

1-17. TROUBLESHOOTING

If you have a problem with the VIDEO TV, first check the power cord connection, then go through the following list. Should the difficulty persist, unplug the unit, and contact your Sony dealer or local authorised Sony service facility.

VIDEO TV RECEPTION

Symptoms	Suggestions
No picture or sound	Make sure the unit is plugged into a working AC outlet. Make sure it is not set to LINE IN mode. Check that POWER is set to ON. Check the antenna wires, connections and direction.
Picture OK, sound poor	Adjust the sound.
Sound OK, no picture	Try another channel. Adjust the picture.
Picture weak or blurred	Check the antenna wires, connections and direction. Adjust picture control.
Picture rolls vertically	Check the antenna wires, connections and direction.
Ghosts (multiple images)	Check the antenna wires, connections and direction. Install a directional antenna.
Wrong color or no color	Adjust color and hue controls.
No response to button pressing	Press the buttons carefully again. Unplug the set, then plug it in and try again.
No response to remote control	Check the polarity (+and) of the batteries. Replace the batteries.

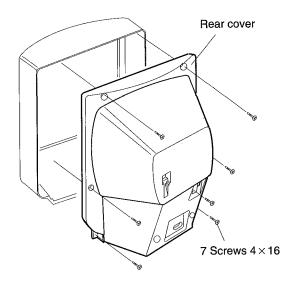
TROUBLESHOOTING

VCR OPERATION

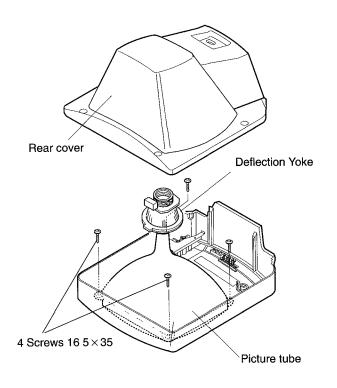
Symptoms	Suggestions
Cannot load video cassettes	Insert the cassette with the window side up and the safety tab facing you. Check if a video tape is already in the VCR.
No operation when buttons are pressed	Cancel the Quick Timer Recording.
Auto play function doesn't work or TV programs can't be recorded	Make sure that the receiving channel of the set is properly tuned. Make sure that the safety tab on the video cassette tape is still intact. Check antenna wires, connections and direction.
Timer recording can't be performed	Make sure the recording start/stop time is correct. Reconnect the power plug to an AC outlet, and reset the program recordings.
There is no picture in playback, or the playback picture is noisy or contains streaks	Check that power is set to ON. Check that the video cassette tape has a recorded program. Check the tracking control (for noise streaks)
Video cassette tape was inserted incorrectly	Wait a few seconds. The video cassette tape should eject itself.

SECTION 2 DISASSEMBLY

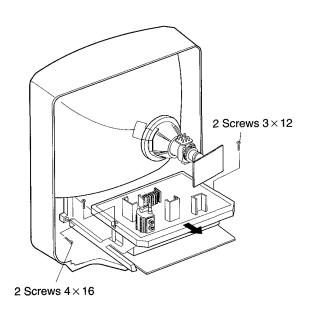
2-1. REAR COVER REMOVAL



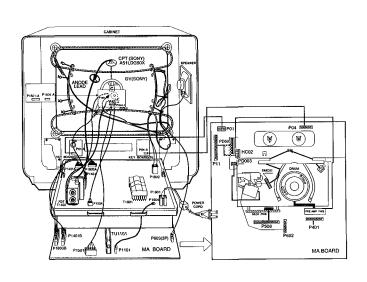
2-3. PICTURE TUBE REMOVAL



2-2.CHASSIS ASSY REMOVAL

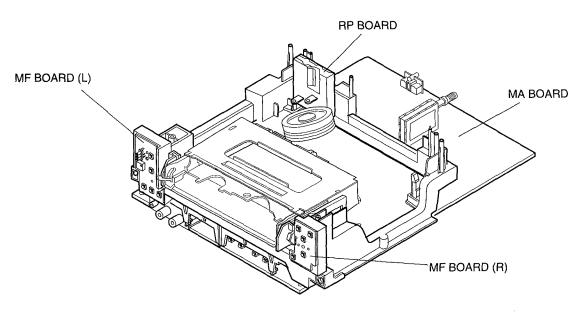


2-4. WIRE DRESSING



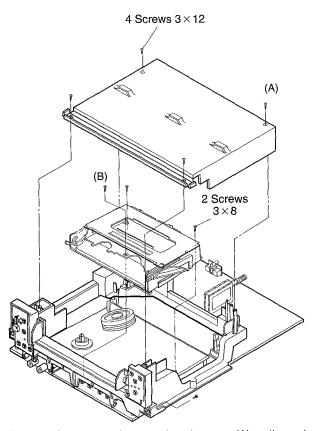
2-5. CIRCUIT BOARDS ARRANGEMENT

Remove the top case from deck assy and main frame.



2-6. TOP CASE & HOUSING ASSY DISASSEMBLY

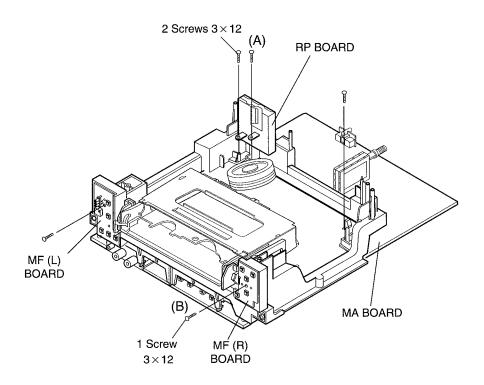
2-7. SERVICE POSITION



- 1) Remove the top case by removing 4 screws (A) on the main frame.
- 2) Remove two screws (B) and then separate the housing assy and main frame

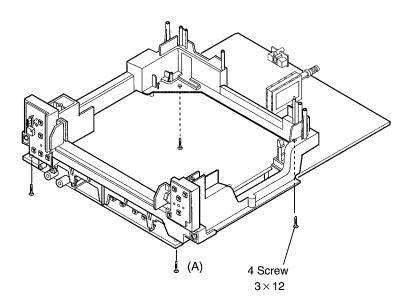
2-8. DECK & RP BOARD DISASSEMBLY

- 1) Remove two screws (A) for disassembling the shield case.
- 2) Remove screw (B) and then separate the main frame and MF (R) board.



2-9. MA BOARD DISASSEMBLY

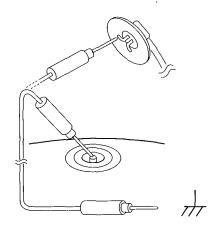
Remove 4 screws (A) and then separate the main frame and MA board



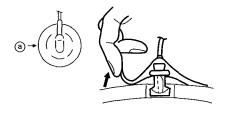
· REMOVAL OF ANODE-CAP

NOTE: Short circuit the anode of the picture tube and anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

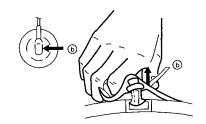
CAUTION: Anode-cap must be removed after discharge.



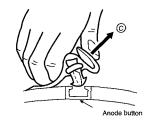
REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



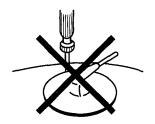
② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ⑤.



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ©.

HOW TO HANDLE AN ANODE-CAP

- () Don't hurt the surface of anode-caps with sharp objects.
- ② Don't press the rubber or you will hurt the inside of the anode-cap. A material fitting called as shatter-hook terminal is built in the rubber.
- 3) Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete re-alignment is required or a new picture tube is installed
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switches should be set as follows unless otherwise noted.

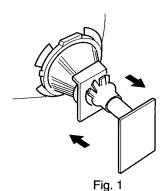
Standard Picture condition.	PICTURE	80%
	BRIGHT	50%
	HUE	50%
	COLOR	50%
<u></u>	- SHARPNESS	50%

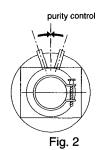
Preperation:

- Input a white signal.
- Before starting, degauss the entire screen

3-1. BEAM LANDING

- 1. Input a raster signal with the pattern generator.
- Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig.2
- 3. Input a green raster.
- 4. Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are at the sides evenly. (Fig.3)
- 5. Move the deflection yoke forward, and adjust so that the entire screen becomes green. (Fig 1)
- Switch the raster signal to red and blue and confirm the condition.
- 7. When the position of the deflection yoke is determined, tighten it with the deflection voke mounting screw.
- 8. When landing at the corner is not right, adjust by using the disk magnets (Fig.4)





Perform the adjustments in order as follows

- 1 Beam Landing
- 2. Convergence
- 3. Focus
- 4. H-line and White Balance

Note: Test Equipment Required.

- 1 Color bar Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4 Digital multimeter

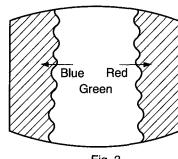


Fig. 3

Purity control

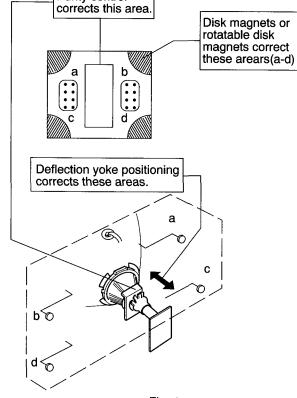


Fig. 4

3-2. CONVERGENCE

Preperation:

- Before starting, perform FOCUS, H.SIZE, V.LIN and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Input a dot signal.

(1) Horizontal and Vertical Static Convergence

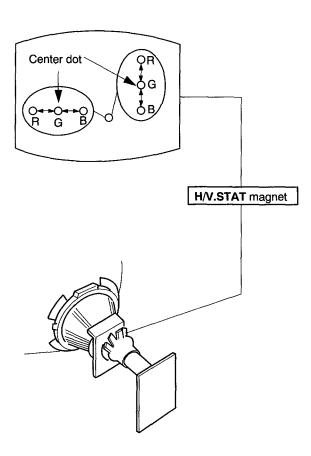
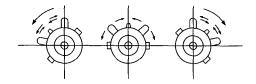
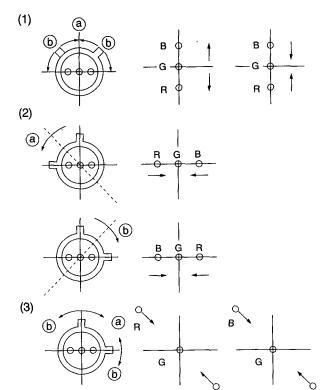


Fig. 5

• Tilt The H/V. STAT magnet and adjust static convergence to open or close the H/V. STAT magnet.



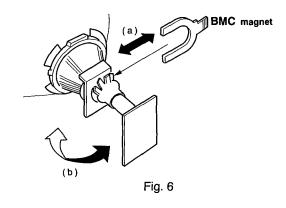
When the H/V.STAT magnet is move in the direction of arrow
 and (b), red, green and blue dots move as shown below



If the blue dot does not cover with red and green dots, refer to Fig 6 perform the following steps.

- Move BMC magnet (a) to correct insufficient H. static convergence.
- 2. Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



(3) Screen-corner Convergence

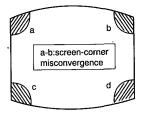
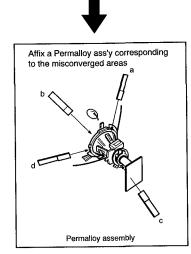


Fig. 9



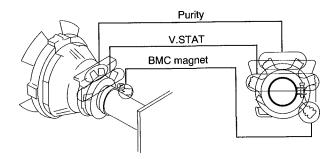
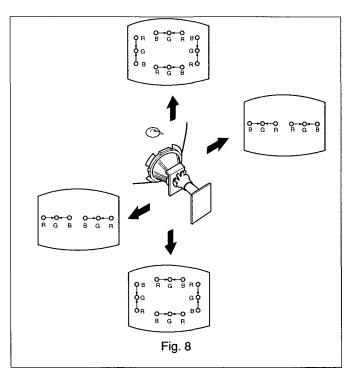


Fig 7

(2) Dynamic Convergence Adjustment

Preparation:

- Before starting, perform Horizontal and Vertical static convergence Adjustment
- 1. Slightly loosen deflection yoke screw
- 2. Remove deflection yoke spacers.
- 3 Move the deflection yoke for best convergence as shown below
- 4. Tighten the deflection yoke screw.
- 5 Install the deflection yoke spacers.



3-3. FOCUS ADJUSTMENT

- Input Cross Hatch Pattern.
- Turn the focus control (VR1907) knob on the C board to obtain the best focus in the center and circumference.

3-4. SCREEN (G2)

- 1. Input a dots pattern.
- 2. Set the PIC, BRT controls at minimum.
- 3. Supply DC 160V by equipment into R.G. and B cathode.
- 4. Adjust VR1908 (SCREEN) so that the raster is invisible.

3-5. WHITE BALANCE ADJUSTMENT

- 1. Input a all white signal.
- 2. Set the PICTURE to minimum and set the BRIGHT at normal. (Refer to P.12 of this manual for the adjustment.)
- 3. Turn VR1901 (R.DRIVE) and VR1902 (B.DRIVE) fully clockwise.
- 4. Adjust BIAS controls for best white balance.
- 5. Set the PICTURE control to maximum. Observe the screen and adjust the DRIVE controls for best white balance.
- 6. Repeat steps 4 and 5.

SECTION 4 SAFETY RELATED CHECK

4-1. CIRCUIT CHECK FOR SAFETY

- 1) Input the color bar signal.
- Connect a 1/2W, 470KΩ resistor between Q1814-B of D board and GND (J90).
- 3) As soon as connecting the external resistor, the receiver stops operating (power:relay off). And removing the external resistor, the receiver operates normally when plug in the AC POWER CORD after plugging it out.

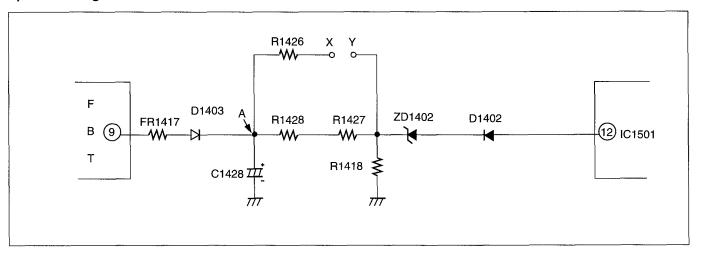
4-2. VERTICAL SHORT CIRCUIT CHECK

- 1) Input the color bar signal.
- 2) Short both terminals C1311 from outside.
- As soon as shorting C1311, the receiver stops operating.
 And removing the external short, the receiver operates normally.

4-3. HOLD-DOWN CHECK

This procedure should always be performed when replacing the following components (marked with _i on the Schematic Diagram). ; IC1501, ZD1402, T1402, DY

1) Circuit Diagram



2) Circuit operating explanation.

Normal condition

DC voltage appears at point X from FBT pulse by rectifying circuit consisted of FR1417, D1403, and C1428. DC voltage of point Y is divided into R1428, R1427, R1418 from DC voltage of point A.

In normal condition, DC voltage of point Y is lower than 6 volt.

So the set is operated normally.

Abnormal Condition

In abnormal condition, DC voltage of point X increase in proportion up to ? volt.

Therefore, the hold down circuit is operated.

In result, the horizontal frequency is stopped.

3) Check the X-Ray protection circuit.

- a. Turn on the set and connect the color bar signal at the antenna terminal.
- b. Check the B+ voltage whether it is correct or not.
- c. If B+ is incorrect, power circuit is to be repaired.
- d. To check the operation of hold down circuit, short points X and Y.
- e. Identify the screen status whether raster is appeared or not.

- If there is distorted synchronism of screen, the set is OK.
- g. Remove the shorted jumper from points X and Y.

4) Troubleshooting the Hold-Down circuit.

Shorting points Xand Y, check the voltage of point Y.

- If the voltage is below 6V DC, check ZD1404, C1428, L1406, R1419, FR1417, and D1403 and replace defective one
- If the voltage is over 6V DC, C1405, R1405, IC1501 and replace defective one.

SECTION 5 CIRCUIT ADJUSTMENT (TV & VIDEO)

5-1. TV Part

1. H-LINE ADJUSTMENT

1) Preliminary Steps

- Input the standard White Signal.
- Set screen to standard condition.
- Set the red and blue driver (VR1901, 1902) to the mechanical center.
- Set the Bias controls (VR1903, 1904, 1905) to the mechanical a third position. (Min.-Max.)
- Make H-line by setting SW1201 to the center position.

2) Adjustment

- Turn the Screen volume knob counterclockwise until the first horizontal line appears in the picture screen.
- Adjust two color bias controls for the colors which do not appear in the horizontal line so that the horizontal line becomes white.
- In state of the horizontal line is white, adjust screen volume so that the brightness of H-LINE become 0.3ft-L or so.
- Adjust SW1201 to the first position for the screen to appear.

2. H-CENTER ADJUSTMENT

- Input the color bar signal.
- Set screen to the standard condition.
- Set the horizontal-center control VR1401 so that right side and left side of the picture are equal. (horizontal center)

3. V-SIZE & V-CENTER ADJUSTMENT

- Input the Color bar signal.
- Set screen to normal position.
- Set screen to center of CRT by converting SW1301.
- Adjust the vertical size (VR1301) for approximately 1/2" overscan at the top and bottom of the display.

4. SUB-BRIGHT ADJUSTMENT

- Input the color bar signal.
- Push the MENU Key of the remote commander.
- Adjust VR1201 so that the step 2 and 3 are differentiated of sub-bright of pattern.
- Push the MENU Key of the remote commander again that the picture goes back to normal.

5. AGC ADJUSTMENT

- 1. Input the color-bar signal.
- Adjust AGC VR of TU101 so that snow noise and crossmodulation disappear from the picture.
- 3. Confirm them at every channel.

5-2. Video Part

This adjustment must be operate after DECK adjusting is finished

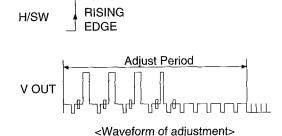
1. PG ADJUSTMENT

1) Necessary Instruments

- 1) TAPE for exclusive use of SP
- 2) Oscilloscope
- 3) 10 1 Probe

2) Adjustment

- 1) PLAY exclusive use of SP tape
- 2) Connect oscilloscope (CH-1) to MAIN PCB J532 (H/SW) and VOL/DIV to 1V Range Trigger
- 3) Connect oscilloscope (CH-2) to MAIN PCB J601 (Video Out) and set it VOL/DIV 500mV Range
- 4) Set TIME/DIV of oscilloscope to 50 us Range
- 5) Adjust VR501 so that V-sync Falling Edge of Video signal become 412 usec \pm 20usec.



* CAUTION: Set oscilloscope trigger mode to DC

2. NORMAL REC BIAS LEVEL ADJUSTMENT

1) Necessary Instruments

- 1) Recording Tape
- 2) RMS Meter

2) Adjustment

- 1) Convert SET to A/V input mode
- 2) Insert recording tape and press REC button
- 3) Connect RMS Meter's (+), (-) to MAIN PCB R606 both endsl respectively
- 4) At this time, adjust VR601 so that the RMS Meter's indicator become within $3.0 \text{mV} \pm 0.1 \text{mV}$

3. Y/C SEP. ADJUSTMENT

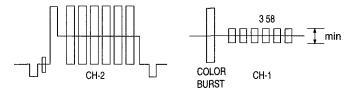
1) Necessary Instrument

- 1) Oscilloscope
- 2) 10 1 Probe 2EA
- 3) Pattern Generator (Multi-Burst Signal)
- 4) Recording Tape

2) Adjustment

- Input Multi-Burst signal (100%) of patern generator to Video in Jack
- 2) Turn the set to A/V MODE
- 3) Press REC button with insert recording Tape
- 4) Connect oscilloscope (CH-1) to MAIN PCB J473 (RF)
- 5) Connect oscilloscope (CH-2) to MAIN PCB J601 (V-OUT) and trigger in order to it indicates adout 2H

6) Set CH-1 of oscilloscope to 20mV Range, and adjust VR401 so that the (358MHz) Y component of rest multiburst signal become minimum



<Adjustment Waveform>

SECTION 6 VCR DECK ADJUSTMENT

This adjustment must be operated after the assembling is finished as Chassis assy

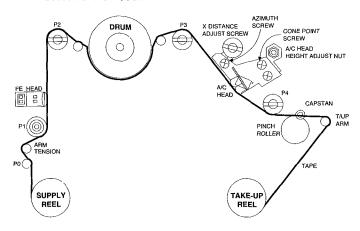
1. TAPE PATH ADJUSTMENT

1) Necessary Instruments

- 1) TAPE for exclusive use of SP
- 2) Osilloscope
- 3) 10 1 Probe 2EA
- 4) Particular Driver for adjustment (P2, P3, X-distance control, Audio (NUT) control)
- 5) RMS Meter (Audio Level Meter)

2) Preliminary Steps

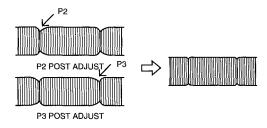
- 1) Connect oscilloscope (CH-1) to MAIN PCB J532(H/SW) (for Trigger of CH-2).
- Connect oscilloscope (CH-2) to MAIN PCB J473(RF). (When adjusting, use CH-2 waveform)
- 3) PLAY by insert TAPE for exclusive use of SP
- As soon as the caption 'AUTO TRK' is appeared after play, make TRACKING intialization by press tracking control up(+) button of Remocon



<Adjust Parts Location>

3) Confirm the RF linearity and adjustment

- Adjust P2 & P3 so that the waveform is maximum and stablized with viewing RF ENVELOPE waveform of SCOPE
- 2) Confirm ENVELOPE waveform is controlled to maximum by press TRK UP(+), DOWN(-) button step by step



<Adjustment waveform>

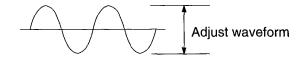
4) X-Distance Adjustment

- 1) Adjust Cone Screw of the DECK so that the RF waveform is maximum
- 2) Confirm that the RF waveform satisfy linearity by adjust TRK UP(+), DOWN(-) button step by step

CAUTION: To treat the 'POOR', when the RF waveform is maximum as turn the Cone Screw more than 2 wheel (2 turns; 720°)

5) Audio Level Confirmation and Adjustment

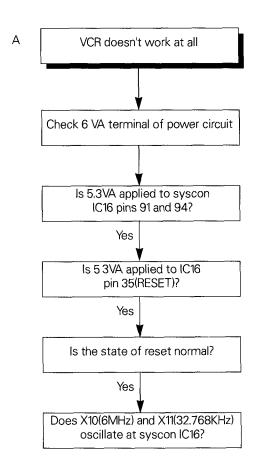
- 1) Connect RMS Merer (Audio Level Meter) "+" terminal to MAIN PCB R620 and "-" terminal to GND, respectively.
- Confirm that the RMS Meter's Audio Level satisfy the following spec and fine control Azimuth Screw of A/C Head in Audio reduction.
- 3) Audio Level Spec 1K , -7 8dBm ± 3dBm 7K , (1KHz) + 3, -5dBm

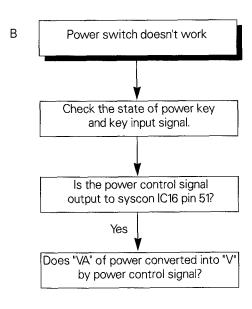


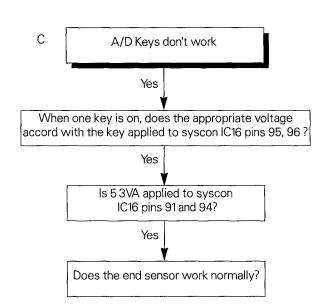
<Adjustment Wavefrom>

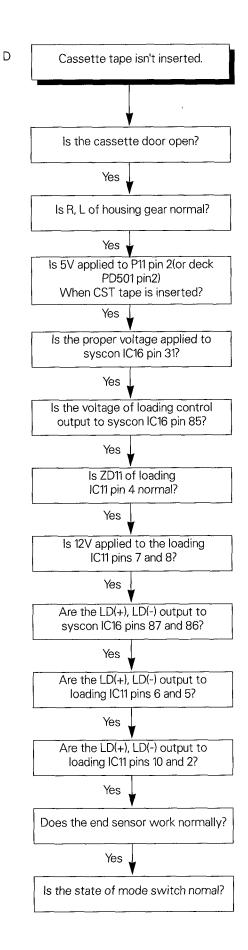
SECTION 7 TROUBLESHOOTING CHARTS

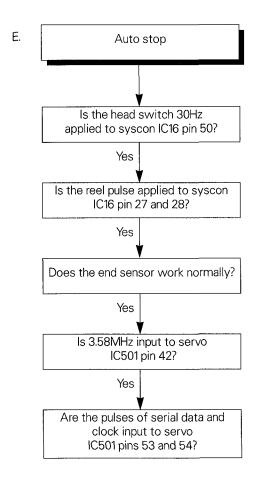
7-1. System Control Part.

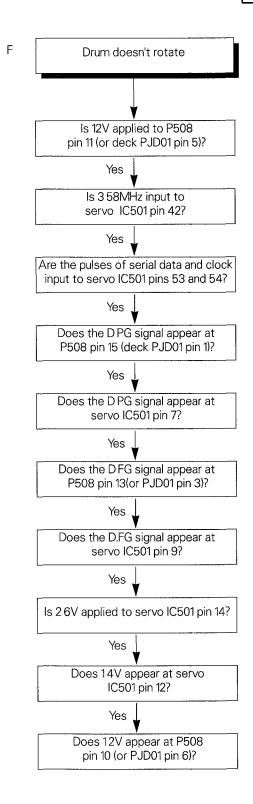


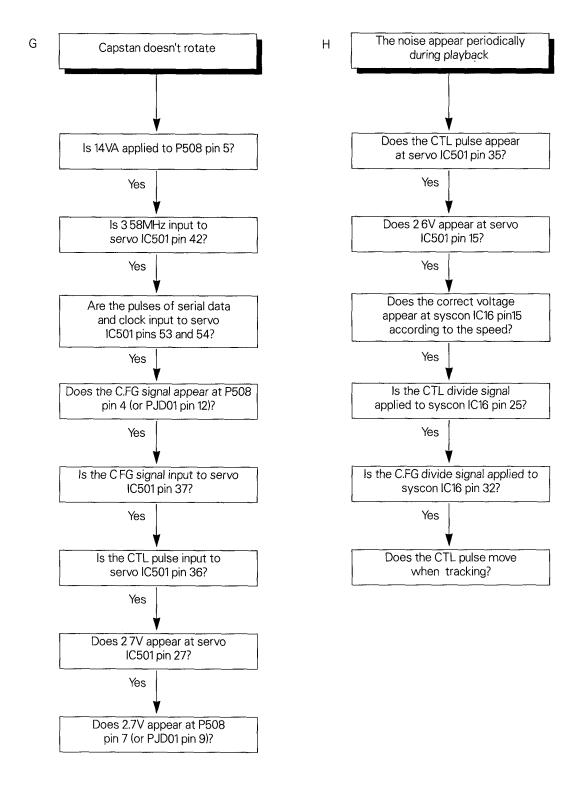




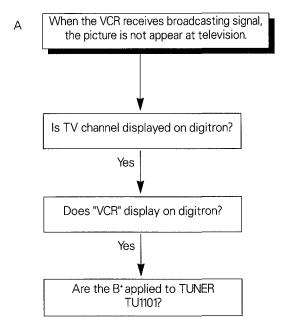


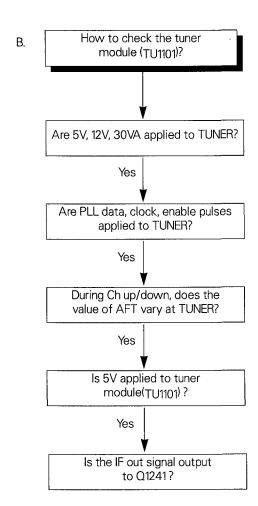


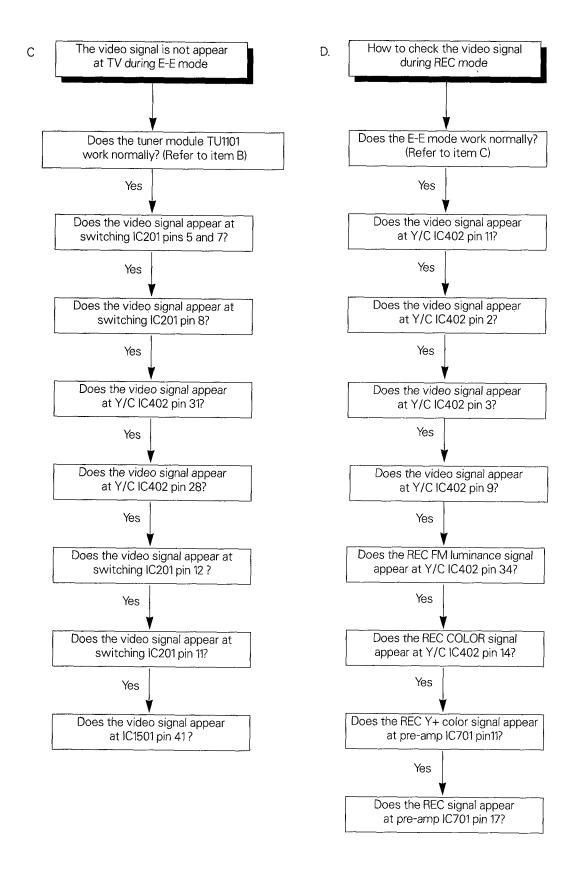


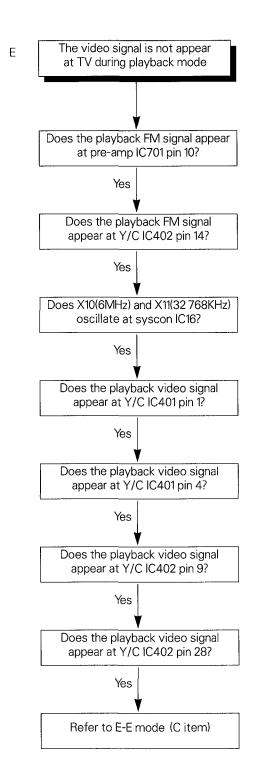


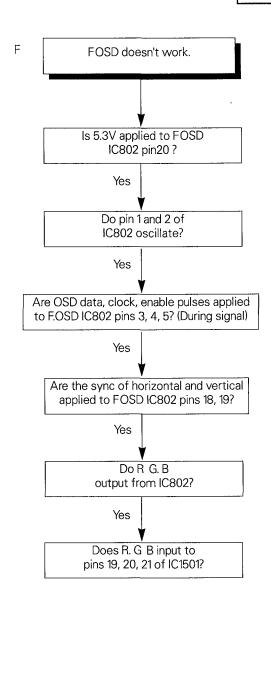
7-2. Video Part.



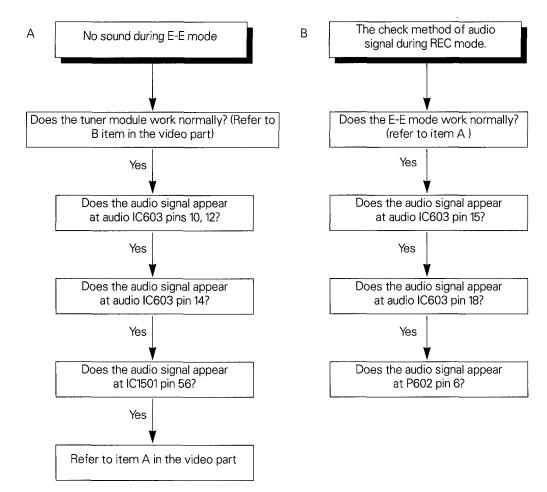


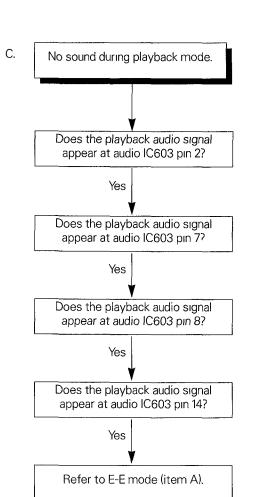






7-3. Audio part.

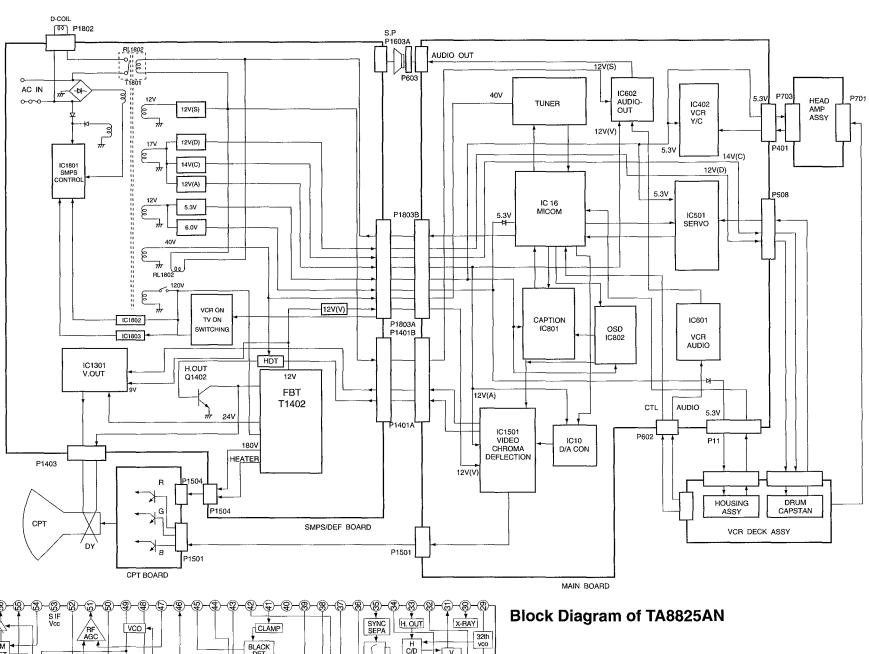


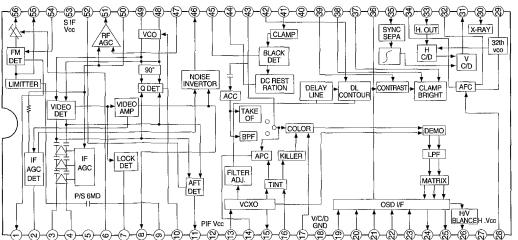


KV-20/13VM30/31 RM-Y138/W KV-20/13VM30/31 RM-Y138/W

SECTION 8 DIAGRAMS

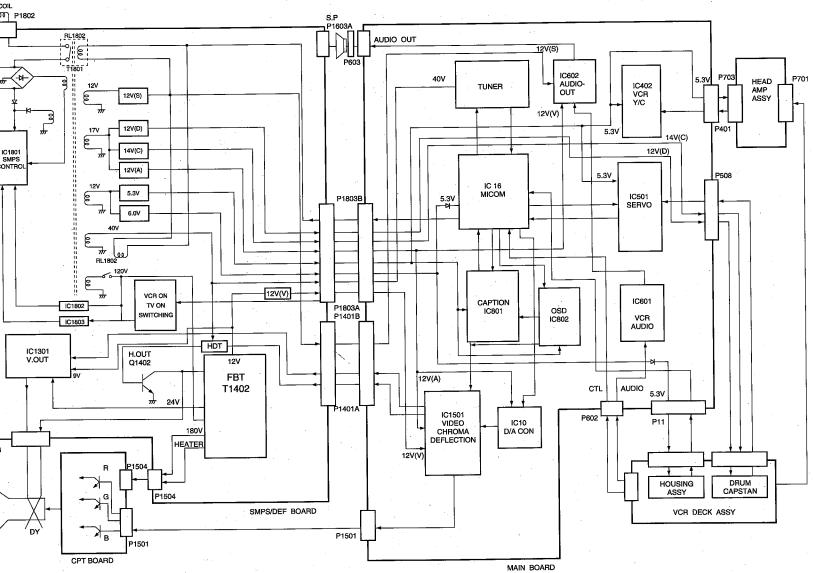
8-1. Block Diagram

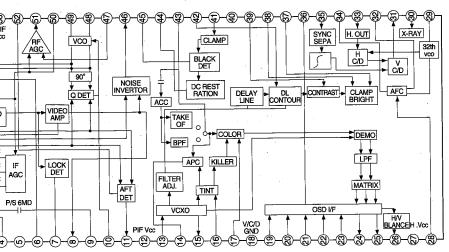




SECTION 8 DIAGRAMS

Diagram

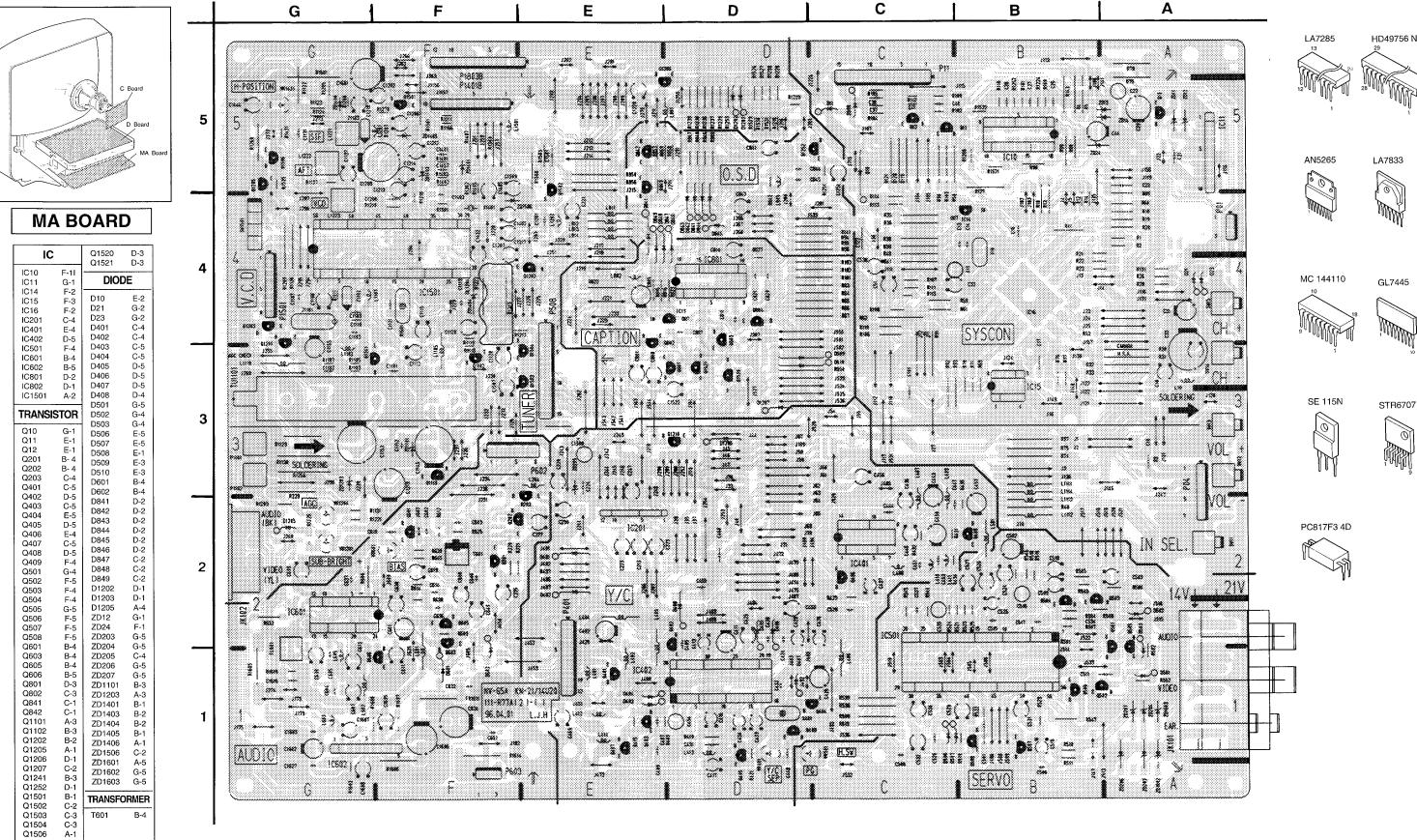




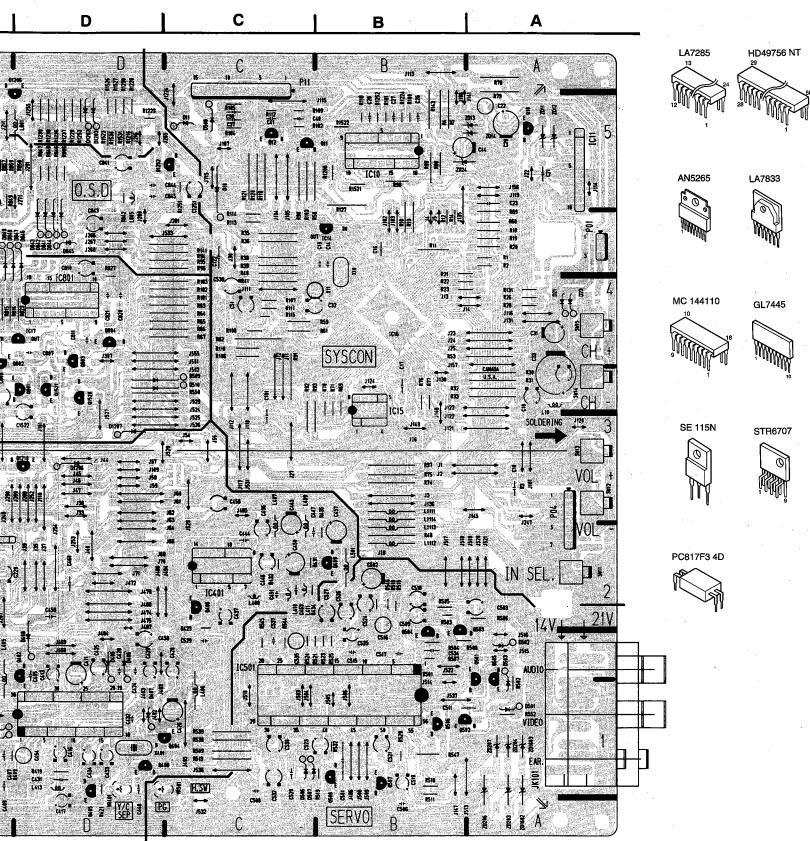
Block Diagram of TA8825AN

8-2. Circuit Boards Location & Printed Wiring Boards

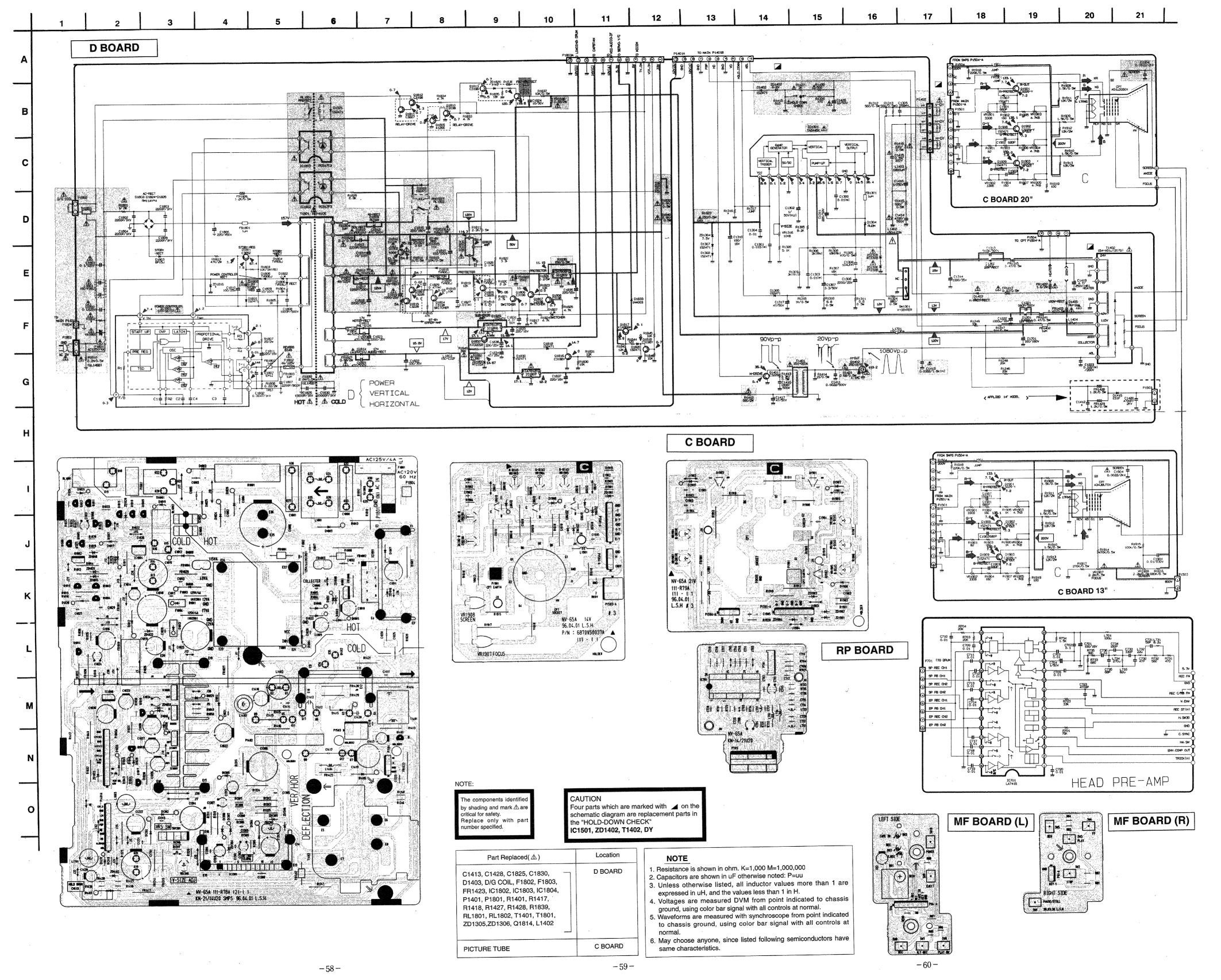
8-3. Semiconductors LA7285 HD49756 NT



8-3. Semiconductors

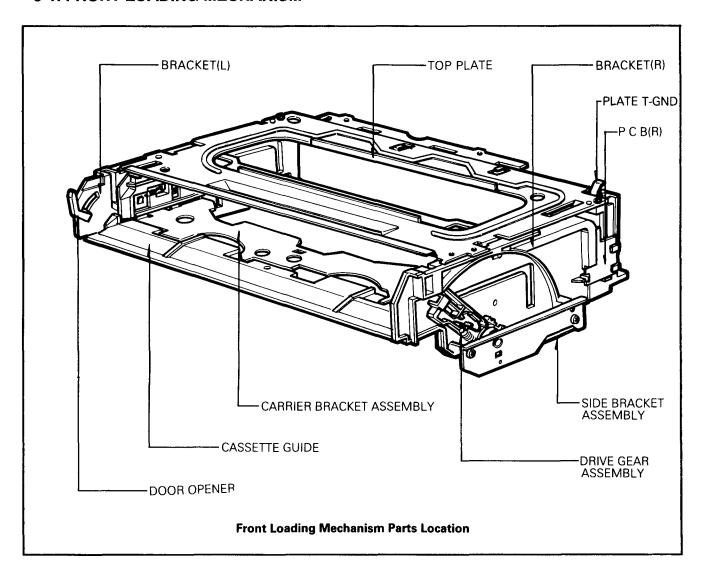


8-4. Schematic Diagrams & Printed Wiring Boards CAUTION Four parts which are marked with on the schematic diagram are replacement parts in the "HOLD-DOWN CHECK" IC1501, ZD1402, T1402, DY **MA BOARD** 12 13 15 11 18 20 21 1 50.40(1KHZ) 9w1501 5vC 9w R1107 330 R1103 4.7k 6.2 R1105 C1102 1.6k 7 0.01 75/A1 EP/LP/SP US14 C1503 I R1557 2204 (031) 77 6841 (031) 220UH C 81301 R1302 3-9K 71-8K R1239≸ 12007 VR1431 10007 10K-B #R1236 R141 ≸ REC MODE ### #1001 TC27 () : PB MODE NO MARK : CONSTANT F69 C101 = OPTION H(R30) CANADA B L(R31) U.S.A R19 270 T C534 MODE DEC STATE IN STA 77% E 775 E 755 E DRUM PO DRUM F.V CAP CAP FV 0502 47/16V FF VP GEN: 中分號 74 133471 2556 PM 153471 CS08 0. 033(M) P512 3. 3x (IAH) VP501 1000B 20206 X 20207 X 0501 152471 05 P502 2: 2K # 6:00 # # 6 ₹P6552 1M ## CALOJO O ## TO EAR A ## TO EAR A ## A TO EAR A VR501 100KB 180K (PH) 1 C122 58 R1603 27k 0. 1 26001 C32005Y 0510 152471 152471 27 C538 5 6x 5. 1 CO 010 CO W MIZIZO + 0.505 HI 3220mVp_p 428Vp_p 51.7Vp_p 615.75KHZ 750HZ 75Vp_p 60HZ | 20W30 | 15W30 | 20W30 | 13W30 | 20W5/16V[STD] | 20W5/16V[STD 1 2.8Vp-p 2 2Vp-p (B) 0. 2Vp-p (G) 1. 4Vp-p (10) 4. 14/9 p. (11) 3. 2Vp-p (12) 4. 0Vp-p (13) 7Vp-p N -55--56--57-



SECTION 9 MECHANISM DISASSEMBLY

9-1. FRONT LOADING MECHANISM



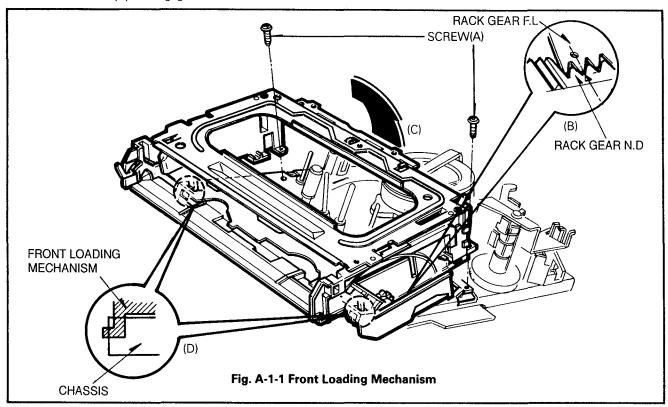
- Component list below will be discribed as if the top and bottom covers and the front panel have already been removed.
- 2 P.C.B Assembly
- 3. Top Plate
- 4. Carrier Bracket Assembly

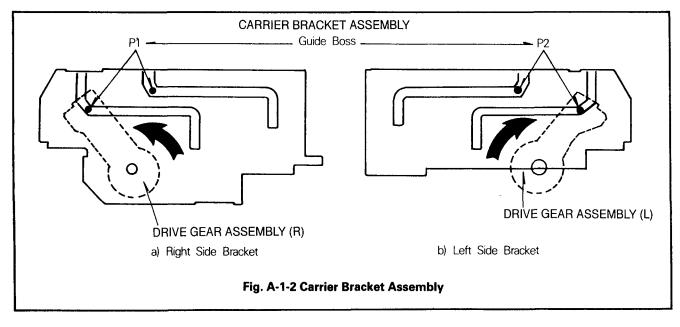
- 5 Cassette Guide
- 6 Side Bracket Assembly
- 7 Bracket(L), (R)
- 8. Door Opener
- 9 Drive Gear Assembly

1. Front Loading Mechanism Assembly (Fig. A-1-1)

- 1) Remove the Top and Bottom Covers and the Front panel.
- 2) Unplug the connector
- 3) Remove two screws(A)
- Lift up the Front Loading Mechanism in the direction of arrow(C)

- 1) When disassembling and reassembling
- ① Give special attention to removal and to reassemble, because two tabs(D) are engaged.
- ② Make sure that Bosses of Bracket(L),(R) are properly engaged in the holes of the chassis.
- ③ To reassemble Front Loading Mechanism, the Drive Gear Assembly should be turned in a counterclockwise as shown in Fig A-1-2 so that the Rack Gear N.D of Front Loading Mechanism Assembly is meshed into Rack Gear F L of Deck Mechanism Assembly correctly as shown in Fig A-1-1 (B)





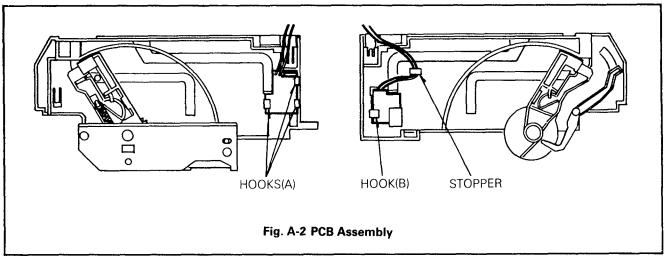
2. PCB(Printed Circuit Board) Assembly

2-1. P.C.B Assembly(R)(Fig. A-2)

- Remove the PCB Assembly(R) by pushing three Hooks (A) outward
- 2) Release the Lead wire from stoppers

2-2. PCB Assembly(L).(Fig. A-2)

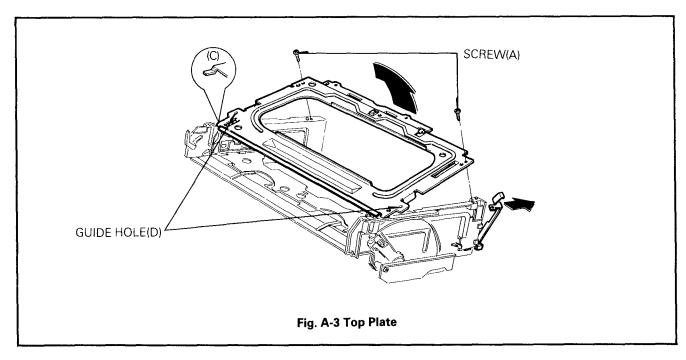
- Remove the PCB Assembly(L) by pushing the Hook(B) outward
- 2) Release the Lead Wire from stoppers



3. Top Plate(Fig. A-3)

- 1) Remove two screws(A)
- 2) Push the upper part of Top plate Ground and then lift up the Top Plate in the direction of arrow(B).

- 1) When reassembling, be certain that the tabs(C) of Top Plate is in both Bracket(L),(R)
- ① Then align the guide holes(D) of Top Plate with Bosses of side Bracket(L),(R)



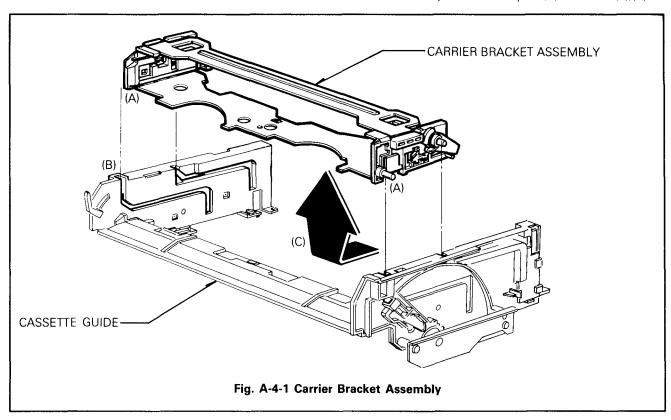
4. Carrier Bracket Assembly

4-1. Carrier Bracket Assembly(Fig. A-4-1)

 Remove the Carrier Bracket Assembly by moving it in the direction of arrow(C)

* NOTE

1) When reassembling, be sure that parts(A) of Carrier Bracket Assembly are seated in parts(B) of Bracket(L),(R)



4-2. Cassette Opener(Fig. A-4-2)

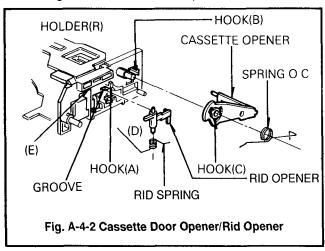
- Release the spring O C from the Hook(A) and then release it from Hook(C) of cassette opener
- Remove the cassette opener by releasing the Hook(B) from the Holder(R)

4-3. Rid Opener(Fig. A-4-2)

1) Remove the rid opener by pushing it outward

* NOTE

1) When reassembling, seat the upper part of the rid opener in the grooved of Holder(R) and push it inward.

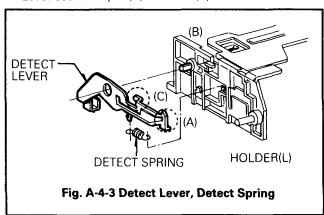


4-4. Detect Lever and Detect Spring

- 1) Remove the spring detect
- Lower the side(A) of Detect Lever and then remove the Detect Lever by pushing it outward

* NOTE

 When reassembling, make sure that the part(C) of Detect Lever set in the part(B) of Holder(R)

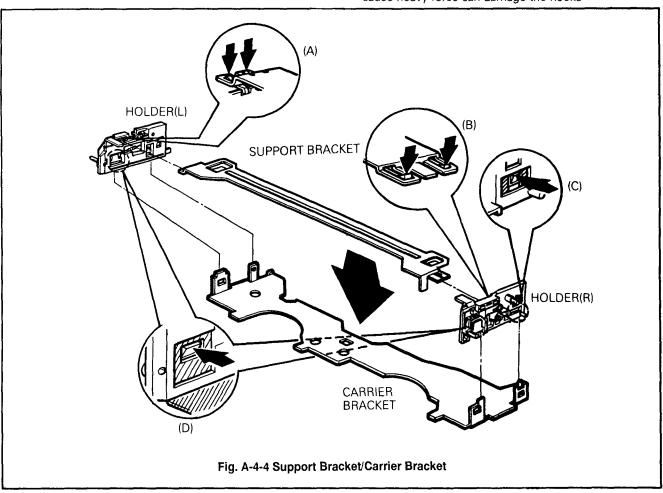


4-5. Support Bracket Assembly(Fig. A-4-4)

1) Take the Support Bracket out by releasing hooks(A),(B)

* NOTE

1) When disassembling and reassembling, be careful because heavy force can damage the hooks



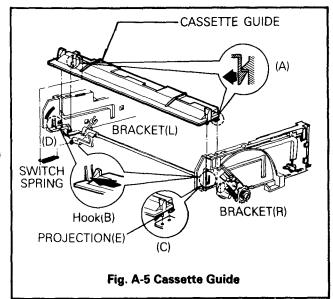
4-6. Carrier Bracket Assembly(Fig. A-4-4)

1) Remove the Carrier Bracket by releasing hooks(C),(D)

5. Cassette Guide(Fig. A-5)

- 1) Remove the Switch Spring with the Front Loading Mechanism Assembly turned over
- 2) Push two hooks(B) outward
- 3) Remove the Cassette Guide by pushing two hooks(A). outward(if one is removed, the other will be easy to remove)

- 1) When reassembling
- ① Seat projections(E) of Cassette Guide in holes of Bracket Assembly(L),(R) and then engage the Hook(A)
- ② After finishing previous step, fix the Cassette Guide to the Bracket Assembly(L),(R) by pushing two hooks(B) inward

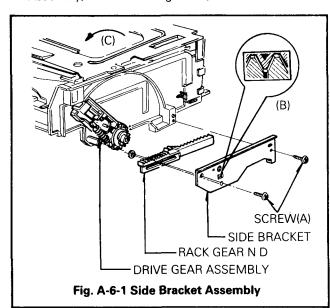


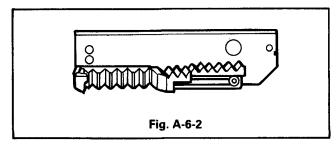
6. Bracket Assembly Side (Fig. A-6-1)

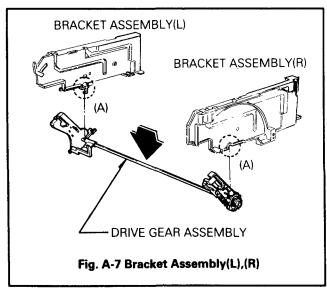
 Remove two screws(A) and then remove the Side Bracket Assembly and the Rack Gear N D

* NOTE

- 1) When reassembling
- Turn the Drive Gear Assembly in the direction of arrow(C)
- ② Reassemble the Rack Gear N D to the Side Bracket Assembly, as shown in Fig A-6-2, and then reassemble







it to the Bracket Assembly(L), This time the Assembling Figure should be the same as(B) at the rectangular hole of Bracket Side

7. Bracket Assembly(L),(R)(Fig. A-7)

 Seperate the Bracket Assembly(L),(R) from the Gear Assembly Drive

* NOTE

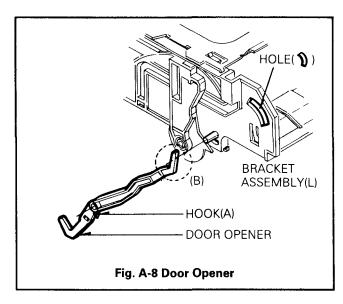
When reassembling, seat the shaft in the part(A) of Bracket Assembly(L),(R)

8. Door Opener(Fig. A-8)

1) Remove the Door Opener by pushing Hook(A) outward

* NOTE

1) When reassembling, seat the part(B) of Door Opener in the hole() of Bracket(L)



9. Drive Gear Assembly

9-1. Drive Gear Assembly(Fig. A-9-1)

 Remove the Drive Gear Assembly from the Bracket Assembly(L),(R)

9-2. Cushion Spring(Fig. A-9-1)

1) Remove the cushion spring from the Gear R

9-3. Cap-D(Fig. A-9-1)

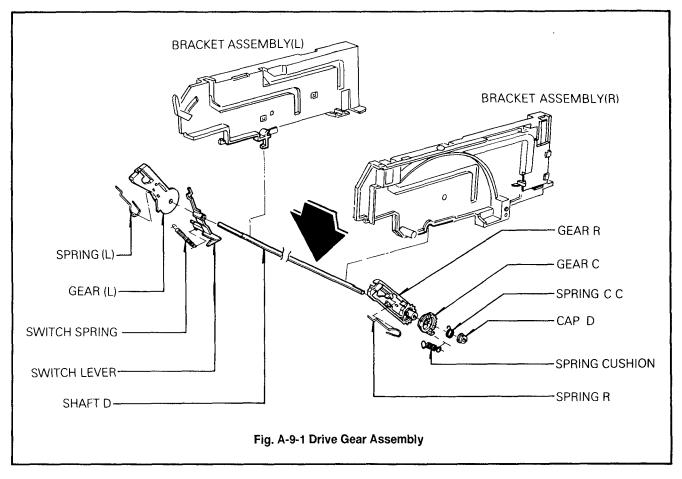
1) Remove the Cap-D by lifting it up

9-4. Spring C.C(Fig. A-9-1)

1) Remove the Spring C C from the Gear R

9-5. Gear C(Fig. A-9-1)

1) Remove the Gear C by lifting up when the projection of Gear C is aligned with the hole of Gear R while rotating the Gear C in the counterclockwise direction.



* NOTE

1) When reassembling, seat the projections of Gear R in the holes of Gear C when the projection of Gear R is aligned with the hole of Gear C and then keep the Gear C turned in the clockwise direction

9-6. Gear R(Fig. A-9-1)

1) Lift up the Gear R from the Shaft

9-7. Spring R(Fig. A-9-2)

1) Remove the Spring R by releasing Hooks

* NOTE

1) When reassembling, be certain Spring R in the part(A) of Gear R

9-8. Gear L.(Fig. A-9-1)

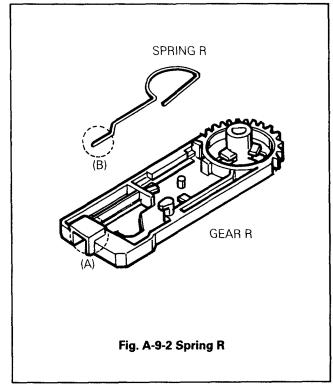
1) Remove the Gear L from the shaft

9-9. Spring L (Fig. A-9-2)

- 1) Remove the Spring L by releasing Hooks from the Gear
- * NOTE: (Refer to the Spring R Section)

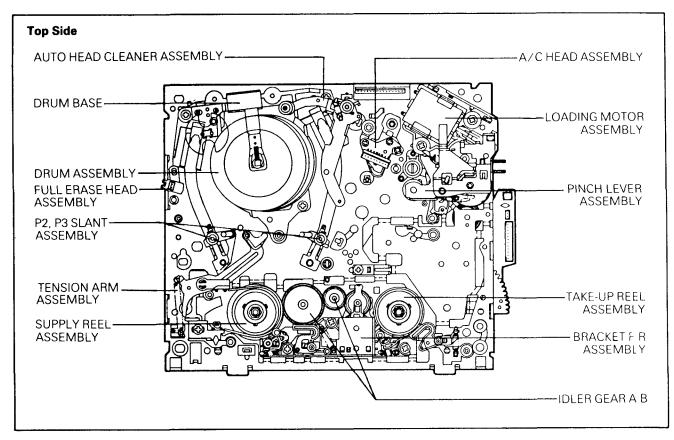
9-10. Switch Lever(Fig. A-9-1)

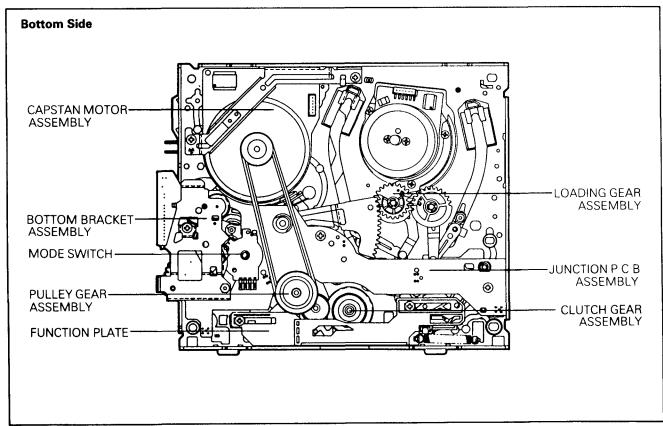
1) Remove the Switch Lever from the shaft



9-2. DECK MECHANISM

Deck Mechanism Parts Location



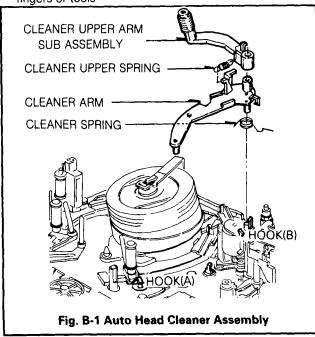


1. Auto Head Cleaner Assembly (Fig. B-1) (Optional Item)

- 1) Remove the Cleaner Arm Assembly (Auto Head Cleaner Assembly) by pushing the Locking Tab (B) outward
- Remove the Cleaner Upper Spring and then remove the Cleaner Upper Arm Sub Assembly
- 3) Remove the Cleaner Spring

* NOTE

1) When reassembling, do not touch the Video Head Tip with fingers or tools

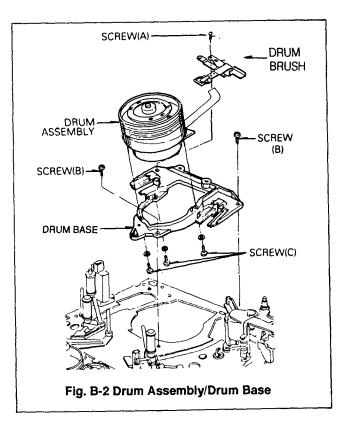


2. Drum Assembly and Drum Base(Fig. B-2)

- 1) Remove the Auto Head Cleaner Assembly (Option)
- Unplug the connector with the Deck Mechanism Assembly turned over
- 3) Loosen the screw(A) and then lift up the Drum Brush
- 4) Remove two screws(B) and then lift up the Drum Assembly and Drum Base from the Deck Mechanism Assembly
- 5) Separate the Drum Assembly from the Drum Base by Loosening three screws(C) on the back of Drum Base

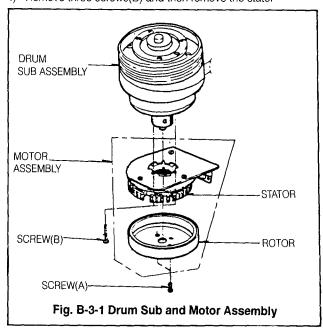
* NOTE

- 1) When disassembling and reassembling
- ① Do not touch the Video Head tip with fingers or tools (Give special attention to disassembling and reassembling of Auto Head Cleaner Assembly)
- ② After reinstalling the Drum Brush, the Drum Brush should be aligned with the center of vertical axis of Drum Assembly
- 3 After completing the reassembly, adjust the transportation system and the Servo P G



3. Drum Assembly

- 3-1. Drum Sub and Motor Assembly (Fig. B-3-1)
 - : New Type (No two screws and P.C.B on the Drum)
- 1) Remove the Drum Base from the Deck Mechanism Assembly
- 2) Separate the Drum Assembly from the Drum Base
- 3) Remove two screws(A) and then remove the rotor
- 4) Remove three screws(B) and then remove the stator



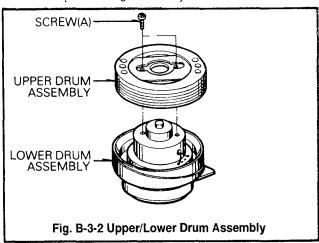
- 1) When disassembling and reassembling
- (1) Do not touch the Video Head Tip with fingers or tools.

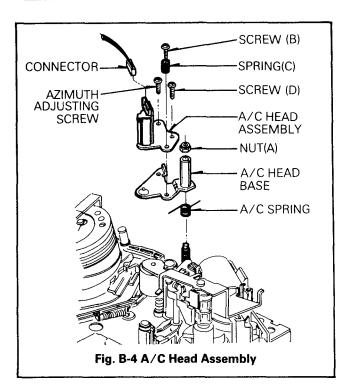
3-2. Upper and Lower Drum Assembly (Fig. B-3-2)

- : Old Type (There are two screws and P.C.B on the Drum)
- Remove the Drum Assembly and Drum Base from the Deck Mechanism Assembly
- 2) Separate the Drum Assembly from the Drum Base.
- 3) Remove two screws(A)
- 4) Remove the PCB
- Separate the upper Drum Assembly from the Lower Drum Assembly.

* NOTE

- 1) When disassembling and reassembling
- (1) Do not touch the Video Head Tip with fingers or tools
- ② Make sure that the color(white) marked on the P.C B of the upper Drum should coincide with the color(Green) marked on the Flange Assembly





4. A/C(Audio/Control) Head Assembly (Fig.B-4)

- 1) Unplug the connector
- Remove the Nut(A), and then lift up the A/C Head Assembly
- 3) Remove the Azimuth Adjusting Screw
- Remove two screws(B),(D) and then separate the A/C Head Assembly from the Base A/C Head Assembly

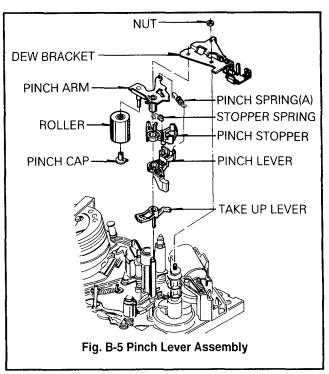
* NOTE

- 1) When disassembling
- 1) First of all, release the spring A/C
- ② Do not touch the A/C Head Tip with fingers or tools
- 3 After reinstalling the Audio Control Head Assembly, adjust the Tilt, Azimuth and Height of A/C Head

5. Pinch Lever Assembly(Fig. B-5)

- 1) Remove one Nut, and then remove the Dew Bracket
- 2) Lift up Pinch Lever Assembly.
- 3) Remove the Pinch Spring, and remove the Pinch Lever
- 4) Remove the Stopper Spring and remove the Pinch Stopper by lifting it up when the Hook of Pinch Stopper is aligned with the hole of Pinch Arm while rotating the Pinch Stopper in the counterclockwise direction.
- 5) Remove the Pinch Cap, and then remove the Pinch Roller Assembly

- 1) When disassembling and reassembling
- ① Be careful not to get any foreign substance on the Roller.
- When disassembling the Pinch Cap, be careful not to damage the Pinch Arm

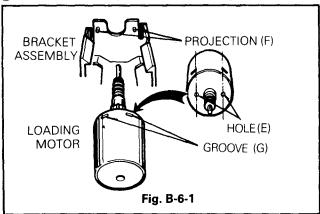


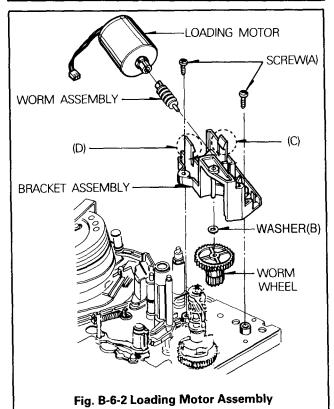
6. Loading Motor Assembly(Fig. B-6-1, B-6-2) 7. Take Up Lever(Fig. B-7)

- 1) Remove the Dew Bracket
- 2) Unplug the connector from the Junction PCB Assembly
- 3) Remove two screws(A)
- 4) Remove the worm wheel by pushing it down
- 5) Remove the Loading Motor Assembly by pushing(C) and (D) outward
- 6) Remove the worm Gear Assembly from the Loading Motor Assembly by pushing it

* NOTE

- 1) When reassembling
- ① Make sure that the worm assembly is seated in the axis of Loading Motor
- (2) Two grooves(G) of Loading Motor should be turned up and two projections(F) of Bracket Assembly should be seated in each at the two holes(E)(Fig B-6-1)
- (3) Take notice of the polarity of the Loading Motor

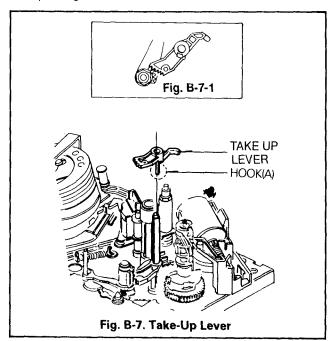




- 1) Remove the Loading Motor Assembly
- Remove the Dew Bracket(Fig B-5).
- 3) Remove the Pinch Lever Assembly(Fig. B-5).
- 4) Keep the Pinch Gear turned in the clockwise direction (180°).
- 5) Remove the Take-Up Lever by pushing the hook(A) outward.

* NOTE

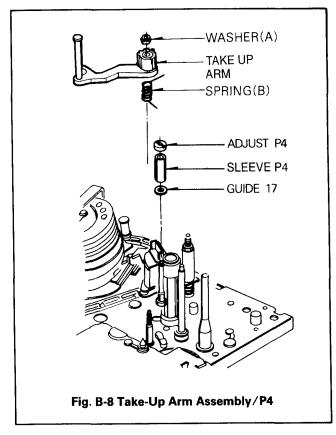
- 1) When disassembling and reassembling
- ① When disassembling the Take-Up Lever, be careful not to break the Hook(A)
- (2) When reassemble the Take-Up Lever, align the appendant Gear of Lever Take-Up with the appendant Gear of Take-
- (3) Reassemble the Take-Up Lever completely by hooking (A)
- (4) Be sure to replace together Take-Up Lever and Pinch
- (5) Be sure to assemble Pinch Lever Assembly before operating.



8. Take Up Arm Assembly(Fig. B-8)

- Remove the Loading Motor Assembly.
- Remove the Dew Bracket, Pinch Gear, and the Take-Up Lever.
- Remove one Washer(A).
- 4) Remove the Take-Up Arm Assembly by lifting it up.
- 5) Remove the spring(B).

- 1) When reassembling
- Align the Gear of Take-Up Arm with the Gear of Take-Up Lever(Fig. B-7-1).

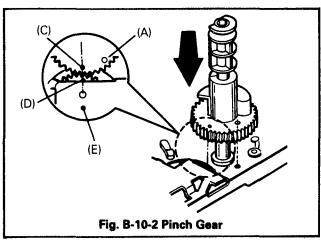


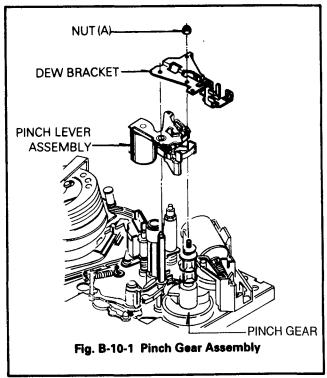
9. P4 Assembly(Fig. B-8)

- 1) Remove the Adjust P4
- 2) Remove the Sleeve P4.
- 3) Remove the Guide 17

10. Pinch Gear(Fig. B-10-1, B-10-2)

- 1) Remove the Loading Motor Assembly.
- 2) Remove one Nut(A) and then remove the Dew Bracket (Fig. B-5).
- 3) Remove the Pinch Lever Assembly by lifting it up(Fig. B-5)
- 4) Keep the Pinch Gear turned in the clockwise direction (180°).
- 5) Remove the Take-Up Lever by pushing the hook(A) outward(Fig. B-7).
- 6) Keep the Pinch Gear turned in the counterclockwise direction (180°).
- 7) Remove the Pinch Gear Assembly.





• NOTE

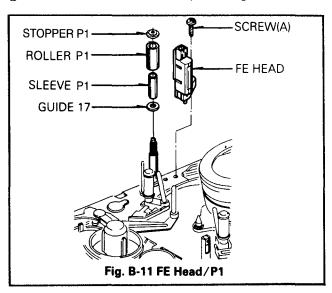
- 1) When reassembling, align the hole(A) of Pinch Gear with the hole of chassis, and the hole(C) of Pinch Gear with the groove(D) of the P C.Gear. Hole(E) of chassis should be aligned with the hole of P.C Gear.
- Be sure to replace together Take-Up Lever and Pinch Gear.
- Be sure to assemble Pinch Lever Assembly before operating.

11. FE(Full Erase) Head Assembly(Fig. B-11) (Optional Item)

- 1) Unplug the connector
- 2) Remove one screw(A), and then remove the FE Head

NOTE

- 1) When disassembling and reassembling
- (1) Do not touch the Video Head Tip with fingers or tools



12. P1 Assembly(Fig. B-11)

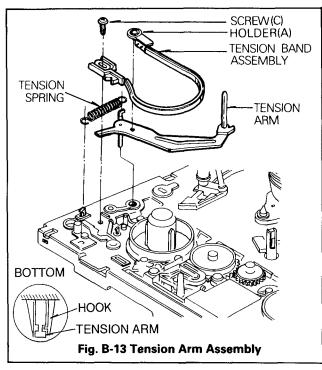
- 1) Remove the Stopper P1.
- 2) Remove the Roller P1.
- 3) Remove the Sleeve P1.
- 4) Remove the Guide 17.

13. Tension Arm Assembly(Fig. B-13)

- 1) Remove one screw(C)
- 2) Remove the Tension Spring
- Remove the Tension Arm Assembly by pushing hooks outward with the Deck Mechanism Assembly turned over
- 4) Remove the Tension Band Assembly from the Tension Arm by pushing Hooks of Holder(A)

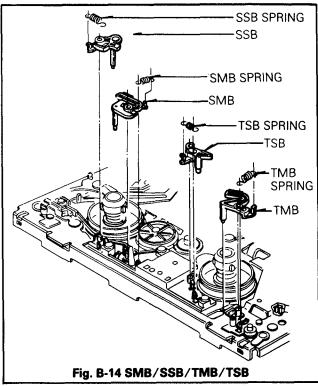
* NOTE

1) When disasembling and reassembling, give special attention to the disassembling and reassembling of Tension Arm Assembly, because the Tension Band is interposed between the Supply Reel and the Soft Brake.



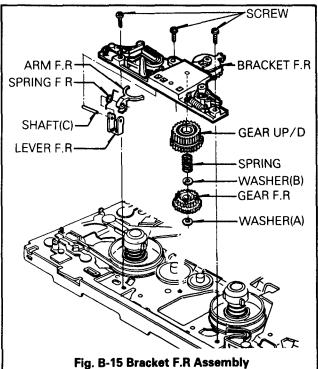
14. Supply Soft/Supply Main/Take-Up Soft/Take-Up Main Brake Assembly

- 1) Supply Soft Brake(SSB)
 - ① Remove the SSB Spring
 - ② Remove the SSB.
- 2) Supply Main Brake(SMB)
 - ① Remove the SMB Spring
 - ② Remove the SMB.
- 3) Take Up Soft Brake(TSB)
 - ① Remove the TSB Spring.
 - ② Remove the TSB.
- 4) Take-Up Main Brake(TMB)
 - ① Remove the TMB Spring
 - ② Remove the TMB.



15. Bracket F/R(FF/Rewind) Assembly (Fig. B-15)

- 1) Remove the TMB
- 2) Remove the Washer(A), and then remove the Gear F.R.
- Remove three screws, and then remove Bracket F/R Assembly from the Deck Mechanism Assembly
- 4) Remove the Washer(B), and spring Up/D, and then remove the Gear Up/D
- 5) Remove the shaft(C), and then remove the Arm F R, Lever F.R and Spring F.R.



16. Supply Reel Assembly(Fig. B-16)

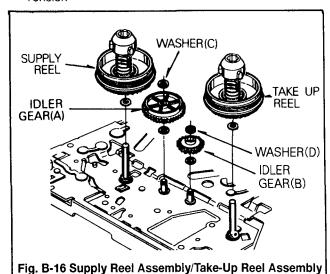
- 1) Remove the Tension Band Assembly
- 2) Remove the Bracket F/R
- 3) Lift up the Supply Reel Assembly from the Deck Mechanism Assembly.

17. Take Up Reel Assembly(Fig. B-16)

- 1) Remove the TMB(Fig B-14)
- 2) Lift up the Take-up Reel Assembly from the Deck Mechanism Assembly

* NOTE

- 1) When reassembling
- ① Make sure that the Supply and Take Up Reel are not exchanged.
- 2 After reinstalling the Supply Reel Assembly, Adjust the Tension

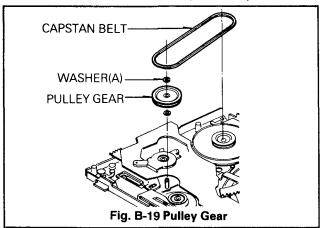


18. Idler Gear(A), (B)(Fig. B-16)

- 1) After removing the Supply Reel and supply Main Brake Assembly, remove the washer(C) and then remove the Idler Gear(A).
- 2) Remove the Washer(D) and remove the Idler Gear(B)

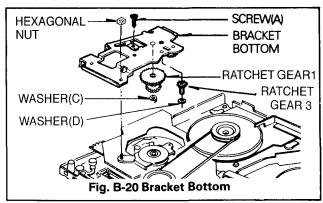
19. Pulley Gear Assembly (Fig. B-19)

- 1) Turn over the Deck Mechanism Assembly
- 2) Remove the Capstan Belt
- 3) Remove the Washer(A) and lift up the Pulley Gear.



20. Bracket Bottom Assembly (Fig. B-20)

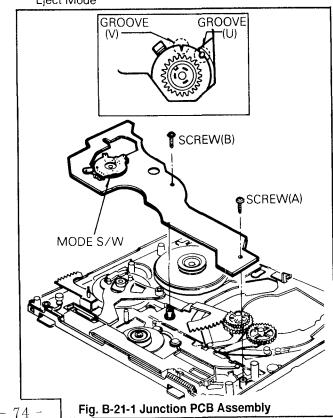
- 1) Remove one screw(A)
- 2) Remove one Hexagonal Nut, and then lift up the Bracket **Bottom Assembly**
- 3) Remove one Washer(C), and lift up the Ratchet Gear 1
- 4) Remove the washer(D), and then remove Ratchet Gear 3 from the Bracket Bottom.

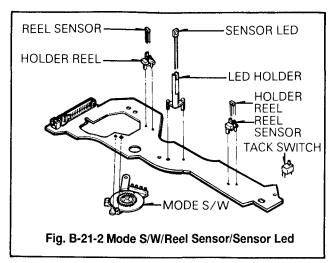


21. Junction PCB(Printed Circuit Board) Assembly(Fig. B-21-1)

- 1) Remove the Bracket Bottom Assembly.
- 2) Remove two screws(A), (B) and then remove the Junction P.C.B Assembly
- 3) Remove the Mode Switch from the Junction P.C B Assembly
- 4) Remove the Reel Sensor, Sensor LEDS and each holder from the Junction P.C.B(Fig. B-21-2).

1) When reassembling the Mode Switch, the groove(V) and (U) of Mode Switch should be at their original place in the Eiect Mode



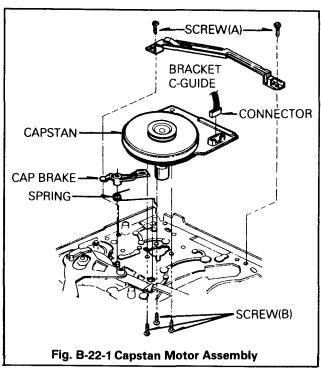


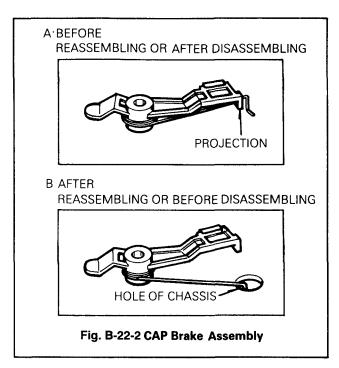
22. Capstan Motor and Brake Assembly (Fig. B-22-1)

- 1) Remove the Junction P C B Assembly
- Hook the end of Capstan Brake Spring to the projection of Capstan Brake and then remove the Capstan Brake Assembly by lifting it up(Fig B-22-2)
- 3) Remove two Screws(A), and then remove the Bracket C-Guide
- 4) Remove the Connector
- 5) Remove three screws(B), and then remove the Capstan Motor Assembly from the Deck Mechanism Assembly

* NOTE

 When disassembling and reassembling, hook end of the spring on the projection of Cap-Brake and remove it by lifting it up Reassemble it in the opposite manner



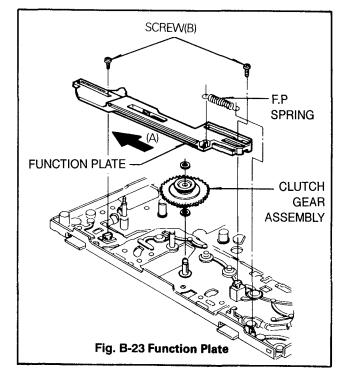


23. Function Plate(Fig. B-23)

- 1) Remove two screws(B) in Eject Mode.
- 2) Remove the Function Plate Spring
- Push the Function Plate in the direction of arrow(A) and then lift it up.

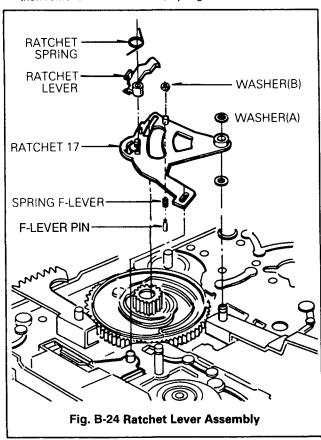
* NOTE

 When reassembling, the groove of Lower part of Function Plate should be aligned with the shaft of Tension Lever Assembly (Fig B-29)



24. Ratchet Lever Assembly(Fig. B-24)

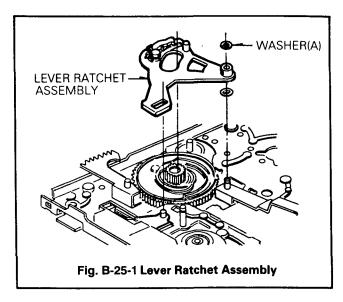
- 1) Remove the Function Plate
- 2) Remove the Junction P C B Assembly
- 3) Remove the Washer(A) and then remove the Ratchet Lever Assembly.
- 4) Remove the Ratchet Spring.
- 5) Remove the Ratchet Lever from the Ratchet 17 by lifting it up when the hook of it is aligned with the hole of Ratchet 17 while rotating it counterclockwise direction
- 6) Remove the Washer(B), and turn over the Ratchet 17 and then remove the F-Lever Pin, Spring F-Lever.

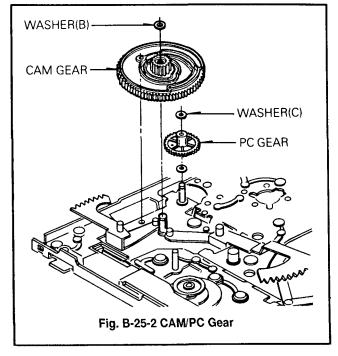


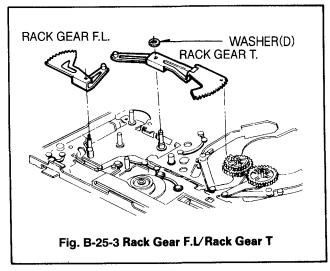
25. Cam Gear/Rack Gear T/Rack Gear FL (Fig. B-25-2)

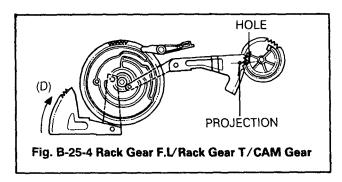
- 1) Remove the washer(A) and remove the Ratchet Lever Assembly (Fig B-25-1)
- 2) Remove the washer(B), and then remove the Cam Gear (Fig B-25-2)
- 3) Remove the Rack Gear F L (Fig B-25-3)
- 4) Remove the Washer(D).(Fig. B-25-3).
- 5) Remove the Rack Gear T.(Fig. B-25-3).

- 1) When reassembling
- Align the Projection of Rack Gear T with the hole of Loading Gear
- ② Drive the Rack Gear F.L in the direction of arrow(D).
- ③ Hole of Cam should be aligned with the hole of chassis, and the groove(■) of Cam Gear should be aligned with the hole of PC Gear (Fig B-26)







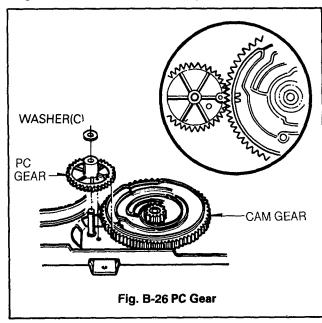


26. PC Gear(Fig. B-26)

- 1) Remove the washer(C)
- 2) Remove the P C Gear by lifting it up

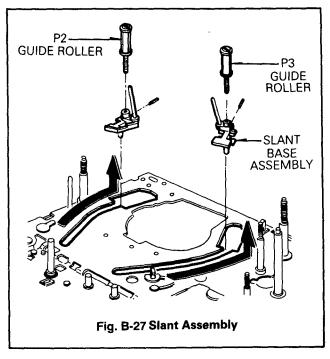
* NOTE

- 1) When reassembling
- The Groove of PC Gear should be aligned with the groove(V) of Cam Gear, and another hole of it should be aligned with the hole of chassis (Fig. B-26)



27. P2 and P3 Slant Assembly (Fig. B-27)

- After finishing the disassembly of Drum Assembly, remove the P2 and P3 Slant Assembly by turning the Loading Gear(R) in the clockwise direction. (Loading direction)
- 2) Loosen the set screws
- 3) Remove the Roller Guide from the Slant Base.



* NOTE

- 1) When disassembling and reassembling
- (1) Use a Hexagonal wrench to remove set screw
- ② Take notice that the P2 and P3 Slant Assembly should not be changed from their original place.

28. Loading Gear Assembly(L),(R) (Fig. B-28)

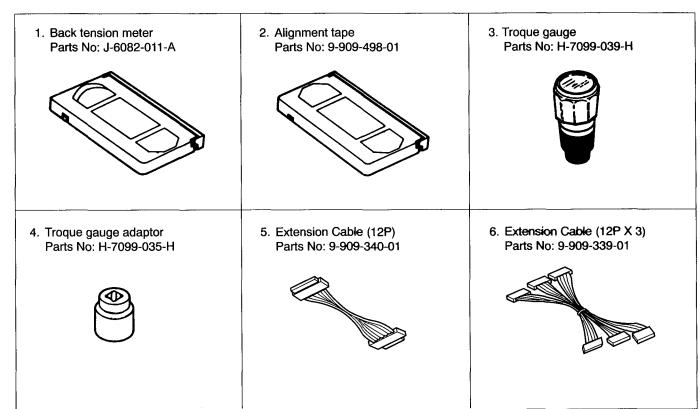
- 1) Remove the Cam Gear, Rack-T.
- Remove the P2 and P3 Slant Assembly by turning the Loading Gear(L),(R) in the Loading direction
- Lift up the Loading Gear Assembly(L),(R) from the Deck Mechanism Assembly
- 4) Remove the Spring Load(L),(R)
- 5) Separate the Loading Gear(L), (R) from Arm Load(L), (R).

* NOTE

- 1) When reassembling
- Make sure that the Loading Gear(L) and (R) should not be changed from their original place.
- ② Align the groove of Loading Gear(L),(O) with the groove of Gear(R),(O)

SECTION 10 MECHANISM ADJUSTMENT

TOOLS AND FIXTURES FOR DECK



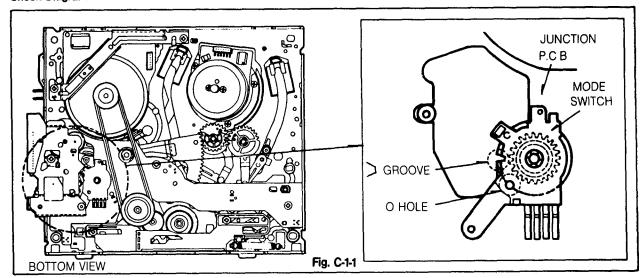
10-1. MECHANISM STATE SWITCH (MODE SWITCH) CHECK

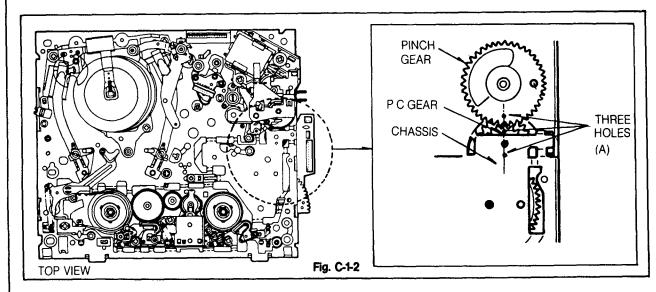
urpose: To detect accurately the mechanism state and prevent the mechanism from malfunction		
Test Equipment/Fixture VCR State Check Point		
Blank tape	Eject Mode (with cassette ejected)	 Mechanism state switch (Mode Switch and Cam)

Check Procedure

- Turn the VCR on and eject the tape by pressing eject button
- Remove the Cabinet Top, the Main P C Board and the CST Housing. Then push the CST IN/OUT switch (Loca #137) and eject button at the same time.
- 3) Turn the worm (Loca #082) of Loading Motor Assembly (Loca #A10) to the left side (counterclockwise) to align the three holes (A) of the Pinct Gear, the P C Gear and the Chassis
- 4) Remove the Bottom Cover and then check that the groove (V) and the hole (O) of Mode S/W are aligned each other. If the above alignment is not obtained, adjust as follows
 - (1) Remove the Bracket Assembly Bottom and the Capstan Belt in the state of power off
 - (2) Remove the PCB Assembly, align the groove (V) and the hole (O) of Mode S/W each other and then reassemble the PCB Assembly
 - (3) Turn the power on and perform the various operations to check that the loading and the unloading are correct

Check Diagram





10-2. PREPARATON FOR ADJUSTMENT (To set VCR to the loading state without inserting a cassette)

- 1) Unplug the power cord from the AC outlet
- 2) Remove the Cabinet Top and Front Loading mechanism.
- 3) Plug the power cord into the AC outlet
- Turn the VCR on and push the tact switch in the PCB Assembly.

The VCR can accept input of each mode in this case However the rewind and review operation cannot be performed for more than a few seconds because the take-up reel table is in the stop state and reel pulses cannot be detected

(NOTE)

Always return the VCR to the Front Loading Mechanism Assembling State in the following order after the above operations have been performed

- 1) Press the Eject button after turning the power on
- 2) Wait for about 10 seconds until searching out the assembly position
- 3) Assemble the Front Loading Mechanism and connect the Front Loading Mechanism Connector
- Refer to the "Front Loading Mechanism Disassembly" which is described previously

10-3. REEL TABLE HEIGHT ADJUSTMENT

Purpose: To make the tension of tape constant so that the contact between the video heads and tape is stabilized

Stabilized		
Test Equipment/Fixture	VCR State	Adjustment Point
Tension Meter (Tension adjustment)	 Play without cassette and with a Tension Meter 	Holder Band(B)

Adjustment Procedures

(Position Adjustment)

- Perform loading without inserting a tape and loosen the screw that attaches the Holder Band(B) to the Deck Mechanism Assembly.
- 2) Insert the (-)type driver between the Holder Band(B) and the "V" groove of the chassis.
- 3) Move the Holder Band(B) right and left and align the center of tension post(Guide T-Post) with the center of P1(Shaft P1).(tolerance:Less than ±0.3mm)
- 4) Tighten the screw that attaches the Holder Band(B) to Deck Mechanism Assembly.

(Tension Adjustment)

- 1) Play the Tension Meter and read the Tension Meter: 38g•cm±4g•cm(reference value).
- 2) If the result is abnormal.
 - over the standard:loosen the screw, move the Holder Band(B) to the right a little and then tighten the screw and make sure that this adjustment is correct.

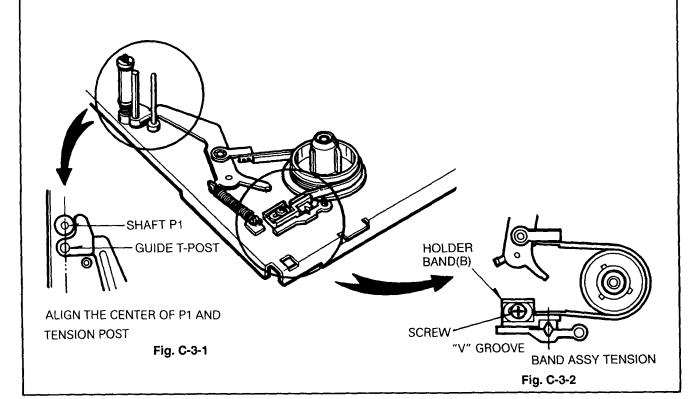
(2) below the standard:loosen the screw, move the Holder Band(B) to the left a little and then tighten the screw and make sure that this adjustment is correct.

CAUTION

The range of movement of Holder Band(B) should be within ±1 5mm while being adjusted

If the range is over, you should recheck the Reel Brake, Tension Arm and Spring.

Adjustment Diagram



10-4. CHECKING TORQUE

Purpose: It is necessary to check the tension, torque and compression force at the tape take-up section and moving section to make the tape run smoothly and satisfy the basic performance of the VCR Check these if the tape does not run smoothly or the tape speed is abnormal

Test Equipment/Fixture	VCR state
● Torque Gauge	 Set the VCR to each operation mode without inserting
■ Torque Gauge Adaptor	a cassette
Cassette Torque Meter	(See '2 Preparation for Adjustment')
SRK-VHT-063 : Play, Cue	
SRK-VHT-303 : Review	

		1	
ltem	VCR Operation mode	Measurement Reel	Measurement Values
Main brake torque,	Eject	Supply and take-up reels	600g cm or more
Slack removal torque	Unloading(power off)	Supply reel	120~220g·cm
Fast forward torque	Fast forward	Take-up reel	600g·cm or more
Rewind torque	Rewind	Supply reel	600g·cm or more
Play take-up torque	Play	Take-Up reel	90~150g·cm
Review Torque	Review	Supply Reel	120~180 g.cm
CUE Torque	Cue	Take-Up Reel	110~170 g.cm

Checking Method

The values are measured by using a torque gauge and torque gauge adaptor with the torque gauge fixed

Note: This value is measured when the VCR is shifted in the unloading direction from the fast forward or rewind mode and quick braking is applied to both Reel Tables

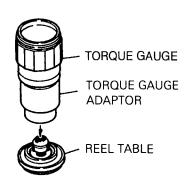


Fig. C-4

10-5. GUIDE ROLLER HEIGHT ADJUSTMENT

Purpose: To regulate the height of tape so that the bottom of tape runs along the tape guide line on the lower drum

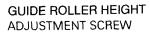
A. Preliminary Adjustment

Test Equipment/Fixture	VCR State	Adjustment Point
 Hexagonal Wrench or Bended Drive (+) Type Post Height Adjusting Driver 	Play an alignment tape	 Guide Roller Height Adjustment Screws on the Supply and Take-Up Guide Rollers

Adjustment Procedure

- 1) Perform the precise adjustment.
- 2) When the Guide Roller is damaged release the Guide Roller retaining screw and then replace the Guide Roller

Adjustment Diagram



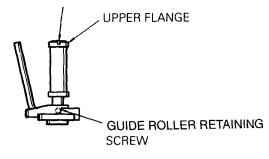


Fig. C-5-1

10-6. PRECISE ADJUSTMENT

Test Equipment/Fixture	Test Equipment Connection Points	VCR State	Adjustment Point
 Oscilloscope Post Height Adjusting Driver Alignment Tape(30HMP-2) Hexagonal wrench 	CH-1 PB RF Envelope CH-2 (NTSC : SW30Hz	● Play an alignment tape	Guide Roller Height Adjustment Screws

Adjustment Procedure

- 1) Play an alignment tape after connecting the probe of the oscilloscope to RF Envelope Output Test Point and Head Switching Output Test Point
- 2) Tracking control(in PB mode) Center position(When this adjustment is performed after the drum assembly has been replaced, set the tracking control so that the RF output is maximum)
- 3) Height adjustment screw Flatten the RF waveform
- 4) Turn(Move) the tracking control(playback) clockwise and counterclockwise (to the right and left)

5) Check that any drop of RF output is uniform at the start and end of the waveform.

CAUTION

If the adjustment is excessive or insufficient the tape is jammed or folded.

Waveform Diagrams

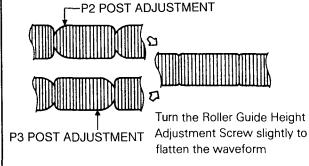


Fig. C-5-2

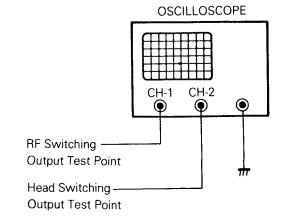


Tracking control at center

Turn(Move) the tracking control to both directions

Fig. C-5-3

Connection Diagram



10-7. AUDIO/CONTROL (A/C) HEAD ADJUSTMENT

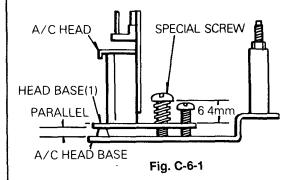
Purpose: To keep the contact between the tape and head so that the specificed track is recorded and played back

A. Preliminary Adjustment (Perform the preliminary adjustment, when there is no Audio Output signal with alignment tape.)

Test Equipment/Fixture	VCR State	Adjustment Points
● M3 Nut Driver		Special screwCone Point Screw for tiltAzimuth Adjustment Screw
◆ Blank tape	● Run the blank tape	●A/C Head Adjuster

Adjustment procedure/Adjustment Diagram

1) Tighten the special screw so that the spring section protrudes 6.4mm(approx.) over the top of Head Base (1).



 Turn the Azimuth Adjustment Screw and Cone Point Screw so that the Head Base(1) and A/C Head Base are parallel

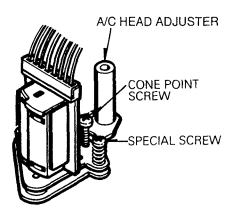
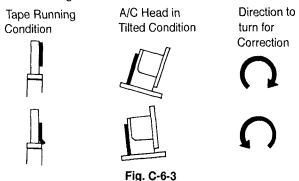


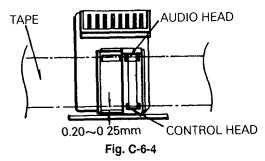
Fig. C-6-2

3) Load a blank tape and set the VCR to the play

- 4) Confirm that the tape runs fittingly to the lower limit of the P4 post. Also confirm that the tape runs smoothly.
- 5) If adjustment is required, turn Cone Point Screw clockwise until curling is apparent at the lower edge of P4. Then turn Cone Point Screw counterclockwise until the curling smooths out.



6) Check that there is no conspicuous curling and folding around the A/C head. If there is conspicuous curling or folding, readjust the Cone Point Screw, Azimuth Adjustment Screw and A/C Head Adjuster. When the bottom edge of tape is 0.20~0.25mm from the bottom edge of the control head's core, the height of A/C head is ideal.



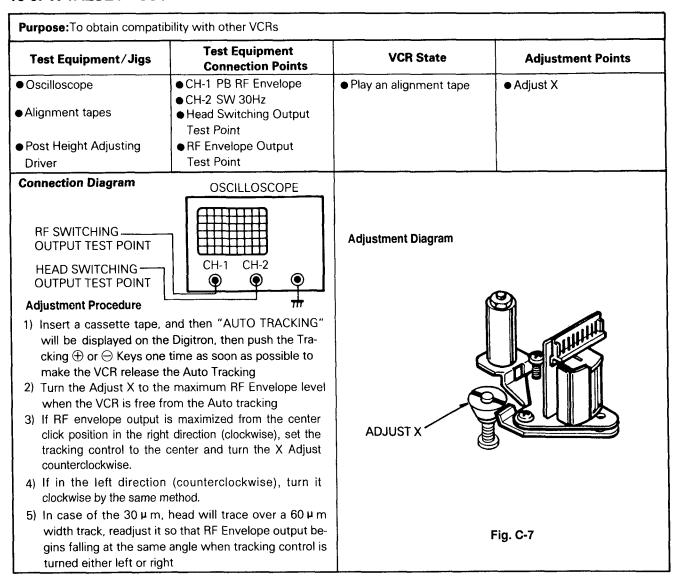
7) If necessary repeat steps 1 through 4 until a precise adjustment is achieved.

10-8. PRECISE ADJUSTMENT

Test Equipment/Fixture	Test Equipment Connection Point	VCR State	Adjustment Points
OscilloscopeAlignment tapesM3 Nut Driver	● Audio output jack	● Play an alignment tape 1KHz, 7KHz sections	Azimuth Adjustment ScrewA/C Head adjusterCone point screw
jack 2) Adjust the Azimuth Adj adjuster and cone point s	ustment Screw, A/C Head screw slightly and alternately butput is maximum and flat.	Waveform Diagram	B B
3) Adjust the Azimuth Adju alternately so that the Au	stment Screw slightly and dio 7KHz output is maximum	A.Maximun	† n BB' Minimum

Fig. C-6-5

10-9. X-VALUE ADJUSTMENT



10-10. ADJUSTMENT AFTER REPLACING DRUM ASSEMBLY (VIDEO HEADS)

Test Equipment/Fixture	Test Equipment Connection Points	VCR State	Adjustment Points
 Oscilloscope Post Height Adjusting Driver Alignment tape Blank tape M3 Nut Driver 	Checking the flatness CH-1 PB RF Envelope CH-2 (NTSC: SW30Hz PAL: SW25Hz Head Switching Output Point RF Envelope Output Point	● Run the blank tape ● Play an alignment tape	 Guide Rollers Precise Adjustment Switching point Tracking point X-Value
Connection Diagram		Waveform Diagram	
RF SWITCHING	OSCILLOSCOPE		
OUTPUT TEST POINT HEAD SWITCHING—— OUTPUT TEST POINT		V ₁ V ₂	
Checking/Adjustment Pr 1) Run the blank tape, checking or creduide is curling or creduide 2) Check the RF envelope Roller Guide Height which adjust the head switching or creduide the switching or creduide the switching or creduide the switching or creduide the switching of the	ocedure ck and adjust whether the Roller easing tape around the Roller output flatness and adjust the le playing an alignment tape	V ₁ /V MAX ; V ₂ /V MAX ;	

10-11. CHECK OF TAPE TRAVEL AFTER REASSEMBLING DECK ASSEMBLY

Check Audio and RF Locking Time during playback after CUE or REV.

Test Equipment/Fixture	Specification	Test Equipment Connection Point	VCR State
 Oscilloscope Alignment tape (with 6H 3kHz Color Bar Signal) Stop Watch 	 RF Locking Time: Less than 5 sec. Audio Locking Time Less than 10 sec. 	CH-1: PB RF Envelope CH-2: Audio Output RF Envelope Output Point Audio Output Jack	Play an alignment tape (with 6H 3kHz Color Bar Signal)

Checking Procedure

Adjust

- 1) Change the mode of CUE or REV to play
- 2) At this time, confirm that the Locking Time of Audio and RF Output Waveform fits to specification.
- 3) If the results checked above are abnormal, reapeat adjustments 4 through 8.

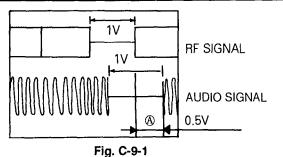
* 6H: LP

Check the coincidence of both Audio and Video Sync.(Lip Sync.)

Test Equipment/Fixture	Specification	Test Equipment Connection Point	VCR State
Oscilloscope 2H 9V Tape(for X-Value Adjustment Coincidence) or alignment tape	● Less than ±0.5V	CH-1: PB RF Envelope CH-2: Audio Output RF Envelope Output Point Audio Output Jack	● Play a 2H 9V tape or an alignment tape.

Checking Procedure

- 1) Confirm that the period (A) of Fig. C-9-1 is within \pm 0.5V.
- 2) If the result is abnormal, repeat adjustment #7. (X-Value adjustment).



* 2H . SP, V: Vertical

Check the occurance of tape curl and jam

Test Equipment/Fixture	Specification	VCR State
● T-160 Tape ● T-120 Tape	 Be sure there is no jam or curl at the beginning, the middle period or the end of the T-160 tape. 	Run the CUE, REV play mode at the beginning and the end of the tape

Checking Procedure

- Confirm whether the state of each transportation post is normal.
- 2) Make sure nothing is wrong with the operation of the Counter, when the lower part of tape is folded.
- 3) Be sure there is nothing wrong in the Audio signal, when the upper part of tape is folded.
- 4) If the result is abnormal, repeat adjustment #5 and #6.

Check the adjustment state of Take-Up Guide

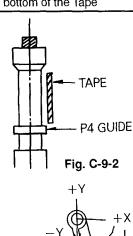
Test Equipment/Fixture	Specification
T-120 TapeTake-Up Guide Adjusting Driver	 Review · Travel the tape that align the top of the P4 Guide and the bottom of the Tape or be folded. Play : Travel the tape that align the top of the P4 Guide and the bottom of the Tape

Checking Procedure

- 1) Run the CUE or PLAY mode at the middle period or the end of the T-120 tape.
- 2) Run the REV mode at the play or cue part of tape.
- 3) At this time, confirm that the change of tape height at the P4 Guide fits to specification.
- 4) If the result is abnormal, refer to Table 9-1
- 5) Play the beginning of T-120 tape(within 5 min.)
- 6) Confirm that the state of tape transportation fit to specification in P4 Guide.
- 7) Remove the Tension Arm Assembly by rotating in the clockwise direction and then confirm that the state of tape transportation fit to specification.
- 8) If the result is abnormal, refer to Table 9-1

PLAY Mode	REV Mode	Adjustment Method
Tape Falling	Tape Lift	Bend the shaft of the direction +Y.
Tape Lift	Tape Falling	Bend the shaft of the direction -Y.

Table 9-1



10-12. MAINTENANCE/INSPECTION PROCEDURE

(1) Required Maintenance

The recording density of a VCR is much higher than that of an audio tape recorder. VCR components must be very precise, at tolerances of 1/1000mm, to ensure compatibility with other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, are necessary

(2) Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR, and the environment in which the VCR is used

But, in general home use, a good picture will be maintained if the inspection and maintenance is made every 1,000hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary	About year	1 About 18 months	
Average hours used per day			
One hour	//////	////////	
Two hours	/////	7///	
Three hours	/////		

(3) Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit

Check with the customer to find out how often the unit is used, and then determine that the unit is ready for in spection and maintenance Check the following parts

Table 2

Phenomenon	Inspection
Poor S/N, no color	Dirt on video head or
	worn video head
Tape does not run or tape	Dirt on pressure roller, belt
is slack	or flywheel belt
Vertical jitter, horizontal	Dirt on video head or in
jitter	tape transport system
Color beats	Dirt on full-erase head
Low volume or sound	Dirt on audio/control head
distorted	
Fast forward or rewind is	Dirt on belt
not done or rotation is	
slow	

(4) Supplies Required for Inspection and Maintenance

- (1) Greases Kanto G-31(or equivalent)
- (2) Alcohol(Isopropyl Alcohol)
- (3) Cleaning Patches

5) Maintenance Procedure

5-1) Cleaning

(1) Cleaning video head

First use a cleaning tape If dirt on head is too stubborn to remove by tape, use the cleaning patch Coat the cleaning patch with alcohol(Isopropyl Alcohol) to the point indicated. Touch the cleaning patch to the head tip and gently turn the head(rotating cylinder) right and left.

(Do not move the cleaning patch vertically and make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged)

Thoroughly dry the head. Then run test tape. If alcohol (Isopropyl Alcohol) remains on the video head, the tape may be damaged when it comes into contact with the head surface.

(2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with alcohol (Isopropyl Alcohol).

Note:

- ① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which move the tape.
- ② Make sure that during cleaning you do not touch the tape transport system with the tip of a screw driver and no force is applied to the system that would cause deforming

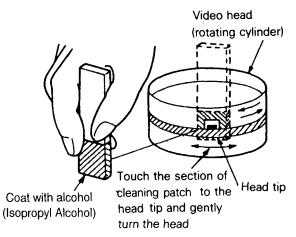


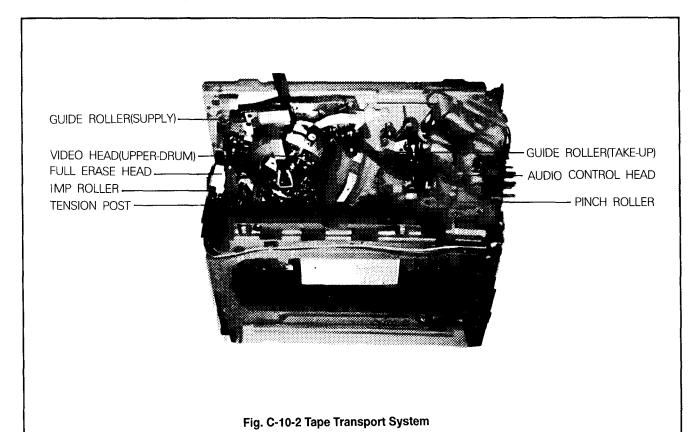
Fig. C-10-1

5-2) Greasing

(1) Greasing guidelines

Apply grease, with a cleaning patch. Do not use excess grease. It may come into contact with the tape transport of drive system. Wipe any excess and clean with cleaning patch wetted in alcohol(Isopropyl Alcohol).

(2) Periodic greasing
Grease specified locations every 5,000hours



Phenomenon	Inspection	Replace ment	
Color beats	Dirt on full-erase head	0	→ ①
Poor S/N no color	Dirt on video head	0	→ ②
Vertical jitter	Dirt on video head Dirt in tape transport system	0	→ ③
Low volume, Sound distorted	Dirt on audio/control head	0	→ ④
Tape does not run Tape is slack	Dirt on pinch roller	0	→ ⑤

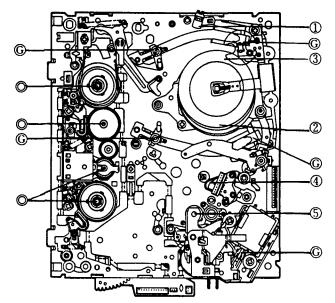


Fig. A-11 Top View of Mechanism

Phenomenon	Inspection Location	Replace ment	
Do not fast forward or rewind, or rotation is slow	Dirt on reel belt	0	→ (6
Tape does not run			**
Slack tape			

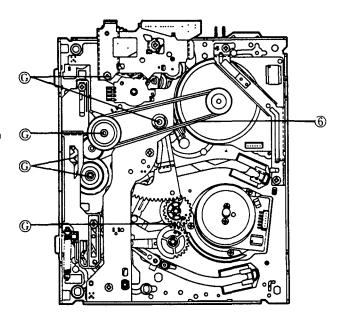


Fig. A-12 Bottom View of Mechanism

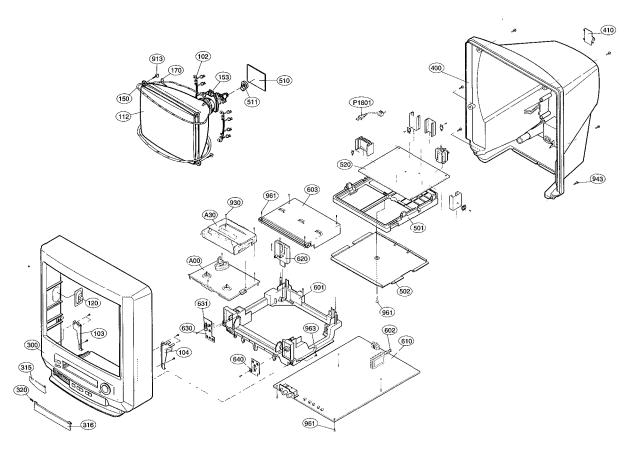
Note:If locations marked with O do not operate normally after cleaning, check for wear and replace.

See the EXPLODED VIEWS at the end of this manual as well as the above illustrations for the sections to be lubricated and greased.

@:Grease

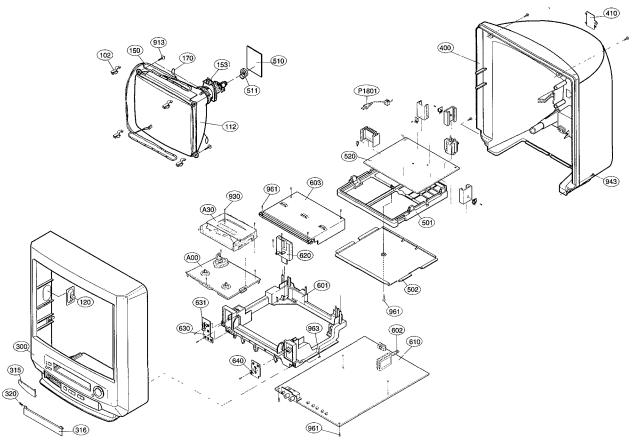
@:Oil

SECTION 11 EXPLODED VIEW (KV-20VM30)



REFNO	PART NO	DESCRIPTION F	REMARK	REFNO	PART NO	DESCRIPTION	REMARK
102	9-909-865-01	HOLDER,D-COIL		511	9-909-869-01	SOCKET PICTURE TUBE	
103	9-939-424-01	SUPPORTER, CPT (L)		520	9-939-359-01	D MOUNT	
104	9-939-425-01	SUPPORTER, CPT (R)		601	9-939-360-01	VCR BRACKET	
***	A serverane	PACTURE TUBE ASSLUATION		602	9-939-361-01	ADAPTER, CONNECTING ANT	
120	9-907-964-01	SPEAKER		603	9-939-362-01	TOP COVER	
190	Assessance .	CONLIDERALISMO		610	9-939-363-01	MA MOUNT	
	Δευσιμμος:	DEFECTION YORK		620	9-939-364-01	RP MOUNT	
170	9-909-857-01	TENSION SPRING		630	9-939-365-01	MF LEFT MOUNT	
300	9-939-352-01	CABINET ASSY KV-20VM30		640	9-939-367-01	MF RIGHT MOUNT	
315	9-939-353-01	DOOR,CONTROL		913	9-909-864-01	SCREW ASSY, HEXAGON HEAD	
						,	
316	9-939-354-01	DOOR.CST		930	9-939-368-01	SCREW MW+3*8	
320	9-907-944-01	SPRING,COIL(FOR DOOR,CST)		943	9-909-480-01	SCREW.PAN HEAD D4 L16	
400	9-939-355-01	BACK COVER ASSY KV-20VM30		950	7-685-648-79	SCREW,BRAZ WASH HD 3 0 L12 0	
410	9-939-356-01	PLATE, POWER CORD		963	9-908-077-01	SCREW,TRUSS HEAD D4 L16	
501	9-939-357-01	D BRACKET				COMP. NOW DR	
201	7 757 557-01	D Did ICHE!		60000000000000000000000000000000000000	00000000000000000000000000000000000000		vaccassassassassassas
502	9-939-422-01	PLATE, SHIELD BOTTOM		! !			
510	9-939-358-01	C MOUNT		1			

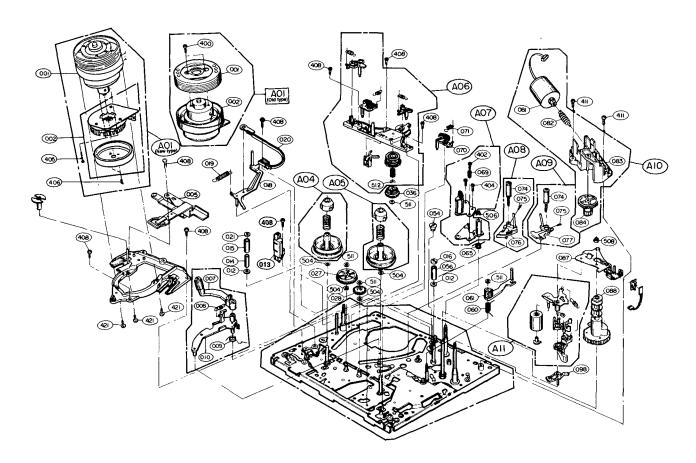
EXPLODED VIEW (KV-13VM30/31)



REFNO	PART NO	DESCRIPTION	REMARK
102	9-908-964-01	HOLDER D-COIL	
*******	. 8735/362401	PACTURE TUBE, A SARBATAN	
120	9-907-964-01	SPEAKER	
****	9.907-962-01	COLUMNATION	
, e e	8.489.418.11	DESTRUCTION YOUR	
170	9-907-961-01	TENSION SPRING	
300	9-939-464-01	CABINET ASSY KV-13VM30	
300	9-939-465-01	CABINET ASSY KV-13VM31	
315	9-939-466-01	DOOR,CONTROL KV-13VM30	
315	9-939-467-01	DOOR,CONTROL KV-13VM31	
316	9-939-354-01	DOOR,CST	
316	9-939-591-01	DOOR,CST KV-13VM31	
320	9-939-391-01	SPRING,COIL(FOR DOOR,CST)	
0=0	9-939-468-01	BACK COVER ASSY KV-13VM3	80
400	9-939-469-01	BACK COVER ASSY KV-13VM3	-
400	9-939-409-01	BACK COVER ASSI KV-13VIVI.) [
410	9-939-356-01	PLATE, POWER CORD	
410	9-939-470-01	PLATE, POWER CORD KV-13VM	131
501	9-939-357-01	D BRACKET	
502	9-939-422-01	PLATE, SHIELD BOTTOM	
510	9-939-461-01	C MOUNT	

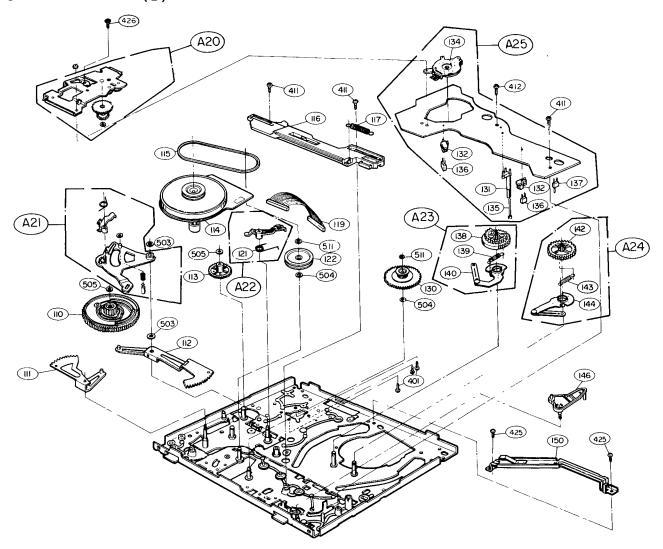
REFNO	PART NO	DESCRIPTION REMARK
511	1-526-819-11	SOCKET PICTURE TUBE
520	9-939-462-01	D MOUNT
601	9-939-360-01	VCR BRACKET
602	9-939-361-01	ADAPTER, CONNECTING ANT
603	9-939-362-01	TOP COVER
610	9-939-463-01	MA MOUNT
620	9-939-364-01	RP MOUNT
630	9-939-365-01	MF LEFT MOUNT
640	9-939-367-01	MF RIGHT MOUNT
913	9-908-080-01	SCREW ASSY,HEXAGON HEAD
930	9-939-368-01	SCREW MW+3*8
943	9-909-480-01	SCREW,PAN HEAD D4 L16
950	7-685-648-79	SCREW,BRAZ WASH HD 3 0 L12 0
963	9-908-077-01	SCREW,TRUSS HEAD D4 L16
*********	N 0-000 327-01	COMO POWER
91801 4	\$ \$4.00 ,000 ,000	COND. POWER (WHITE)

Moving Mechanism Section(I)

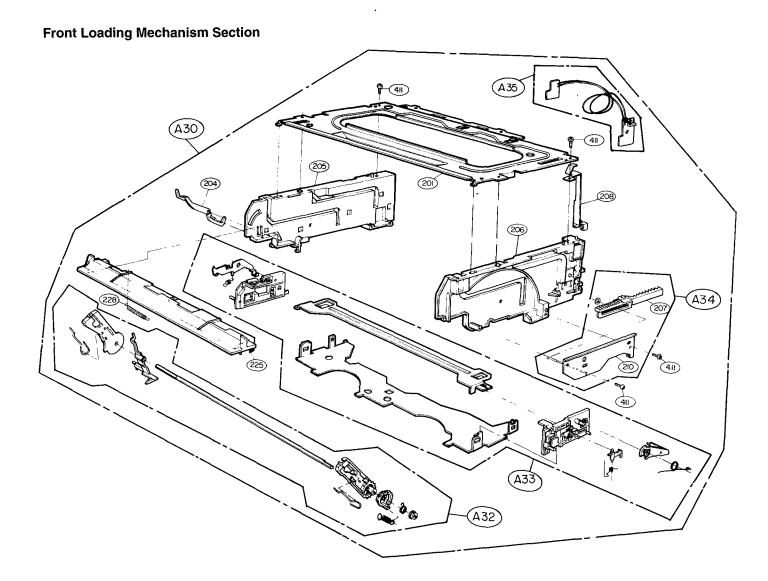


REF NO	PART NO	DESCRIPTION	REMARK	' REFNO	PART NO	DESCRIPTION	REMARK
KEI NO				KEITO			
A01	9-908-441-01	DRUM ASSY GSA D-17 NTSC		060	9-908-369-01	SPRING T/UP	
A04	9-908-362-01	REEL ASSY S17		061	9-908-293-01	ARM ASSY T/UP	
A04 A05	9-908-288-01	REEL ASSY T17		065	9-908-356-01	SPRING A/C	
A06	9-908-243-01	BRACKET ASSY F/R		069	9-908-241-01	SPRING AZIMUTH	
A07	9-908-228-01	BASE ASSY A/C		070	9-908-338-01	BRACK ASSY T-MAIN	
AUI	y-y00-220-01	BASE AGGI AC		1 070	J-300-330-01	DICIENTION TIME	
A08	9-908-202-01	BASE ASSY,P2		071	9-908-380-01	SPRING TMB	
A09	9-908-196-01	BASE ASSY.P3		074	9-908-198-01	ROLLER ASSY, GUIDE	
A10	9-908-216-01	MOTOR ASSY LOAD		075	9-908-199-01	SCREW MINIATURE	
A11	9-908-313-01	LEVER ASSY PINCH		076	9-908-203-01	BASE SUB ASSY, SLALT (L, W-W)	
001	9-939-417-01	DRUM SUB ASSY		077	9-908-197-01	BASE SUB ASSY, SLALT (R, W-W)	
***				1		, , , ,	
002	9-908-442-01	DRUM ASSY, LOWER (D17-2CH)		081	9-908-224-01	MOTOR SUB ASSY, L	
005	9-908-341-01	BASE ASSY D-BRUSH		082	9-908-221-01	WORM ASSY	
007	9-908-388-01	ARM SUB ASSY, CU		083	9-908-217-01	BRACKET SUB ASSY L/M	
008	9-908-395-01	SPRING CU		084	9-908-220-01	WHEEL WORM	
009	9-908-394-01	SPRING CL		087	9-908-375-01	BRACKET ASSY DEW	
				!			
010	9-908-387-01	ARM CL		. 088	9-908-374-01	GEAR PINCH (N)	
012	9-908-344-01	GUIDE 17		098	9-908-370-01	LEVER T-UP (N)	
013	9-908-343-01	HEAD FE, HVFHF0010AK		400	9-908-503-01	PAN HEAD MACHINE	
014	9-908-345-01	SLEEVE P1		402	9-908-238-01	SCREW SPECIAL	
015	9-908-346-01	ROLLER P1		404	9-908-239-01	SCREW CONE POINT 3X10	
				1			
016	9-908-382-01	ADJUST P(4)		408	9-908-171-01	BINDING HEAD MA	
018	9-908-206-01	ARM ASSY TENSION		411	9-908-163-01	SCREW SPECIAL (3X12)	
019	9-908-355-01	SPRING TENSION		! 412	9-908-422-01	BINDING HEAD MA	
020	9-908-211-01	BAND ASSY TENSION		421	9-908-413-01	PAN HEAD MACHINE	
021	9-908-348-01	STOPPER P1		504	9-908-434-01	WASHER PS DE	
				!			
027	9-908-360-01	GEAR IDLE (A) POM 3G		506	9-908-342-01	NUT NYLON M3	
028	9-908-361-01	GEAR IDLE (B) POM 3G		508	9-908-998-01	NUT NYLON(M3)	
036	9-908-358-01	GEAR F/R		511	9-908-427-01	WASHER STOPPER	
054	9-908-357-01	ADJUST X-ASSY		512	9-908-434-01	WASHER STOPPER	
056	9-908-353-01	SLEEVE P4		t			

Moving Mechanism Section(I)



REFNO	PART NO	DESCRIPTION	REMARK	REFNO	PART NO	DESCRIPTION	REMARK
A20	9-908-325-01	BRACKET ASSY BOTTOM		136	9-908-297-01	SENSOR SG-105(REEL) D-16KOC	
A21	9-908-281-01	LEVER ASSY RAT		137	9-908-304-01	SWITCH ESE-105SV1	
A22	9-908-276-01	BRAKE ASSY CAP		138	9-908-180-01	GEAR LOAD(R)	
A23	9-908-179-01	ARM ASSY LOAD(R)		139	9-908-181-01	SPRING LOADING	
A24	9-908-187-01	ARM ASSY LOAD(L)		140	9-908-182-01	ARM SUB ASSY	
1121	, , , , , , , , , , , , , , , , , , , ,	THOU I BOID (B)		1	7 700 102 01	111111 505 1105 1	
A25	9-908-294-01	PWB ASSY D-17,VCR		142	9-908-188-01	GEAR LOAD(L)	
110	9-908-381-01	CAM D17		143	9-908-189-01	SPRING LOADING	
111	9-908-337-01	GEAR ASSY RACK F/L		144	9-908-190-01	ARM SUB ASSY (L)	
112	9-908-336-01	GEAR ASSY RACK T		1 146	9-908-383-01	LEVER ASSY A-TEN	
113	9-908-379-01	GEAR PC		1 150	9-908-397-01	BRACKET ASSY C-GUIDE	
				İ			
114	9-939-418-01	MOTOR CAPSTAN GVC-017S		400	9-908-503-01	PAN HEAD MACHINE	
115	9-908-354-01	BELT CENTER		401	9-908-245-01	PAN HEAD MACHINE	
116	9-908-367-01	PLATE F17		411	9-908-163-01	SCREW SPECIAL (3X12)	
117	9-908-368-01	SPRING FP		412	9-908-422-01	BINDING HEAD MA	
121	9-908-280-01	SPRING CAPSTAN		425	9-908-419-01	BRAIZER HD TAP	
				į			
122	9-908-359-01	PULLEY GEAR POM 3G		426	9-908-420-01	PAN HEAD MACHINE	
130	9-908-269-01	CLUTCH ASSY POM 7G FELT		503	9-908-426-01	WASHER STOPPER	
131	9-908-299-01	HOLDER LED(O)		504	9-908-434-01	WASHER P.S D3	
132	9-908-298-01	HOLDER		505	9-908-434-01	WASHER STOPPER	
134	9-908-300-01	SWITCH MODE		511	9-908-427-01	WASHER STOPPER	
				1			
135	9-908-302-01	DIODE LED IR SENSOR EL-55L		512	9-908-434-01	WASHER STOPPER	
				1			
				•			



REFNO	PART NO	DESCRIPTION	REMARK	REFNO	PART NO	DESCRIPTION	REMARK
A30	9-908-123-01	HOUSING ASSY		205	9-908-124-01	BRACKET LEFT (D17)	
A32	9-908-142-01	GEAR ASSY DRIVE		206	9-908-125-01	BRACKET RIGHT (D17)	
A33	9-908-130-01	BRACKET ASSY CARRIER		207	9-908-167-01	GEAR RACK N/D	
A34	9-908-164-01	BRACKET ASSY SIDE		208	9-908-126-01	PLATE GND TOP	
A35	9-909-882-01	PWB ASSY SENSOR		210	9-908-165-01	BRACKET SIDE	
				Ì			
201	9-908-129-01	PLATE TOP		225	9-908-127-01	GUIDE CST	
204	9-908-153-01	OPENER DOOR		228	9-908-128-01	SPRING S/W	
				! 411	9-908-163-01	SCREW SPECIAL (3X12)	

SECTION 12 ELECTRICAL PARTS LIST

NOTE

The components identified by shading and mark Δ are critical

for safety
Replace only with part number specified

Les composants identifies par une frame et une marque \triangle sont critiques pour la securite Ne les remplacer que piece portant le numero specifie

- Items marked '*' are not stocked since they are seldom required for routine service Some delay should be anticipated when ordering these items
- All variable and adjustable resistors have characteristic curve ß unless otherwise noted

CAPACITORS

MF: μF, PF: μμF

include the board name

COILS UH, μH

When indicating parts by reference number, please

- **RESISTORS**
- All resistors are in ohms
- F: nonflammable

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
	* 9-939	463-01 MA MOUNT COMPLE	TE (13V)	C1401	1-162-217-31	C,TUBULA(TC)	56PF 50V J
		363-01 MA MOUNT COMPLE	\ <i>'</i>	(20V)	1-162-201-31	C,TUBULA(TC)	12PF 50V J
	, ,,,,		, ,	C1402	1-126-963-11	C,ELECTROLYTIC	4 7UF STD 50V M
		***********	• •	C1405	1-126-963-11	C,ELECTROLYTIC	4 7UF STD 50V M
		<capacitor></capacitor>		C1432	1-126-967-11	C,ELECTROLYTIC	47UF STD 16V M
		CATACITOR>		C1501	1-162-279-31	C,TUBULA(HIGH DIELE)	75PF 50V K
	9-939-278-01	CONNECTOR ASSY 3P (L=	400)FOR SPEAKER	C1501	1-102-279-31	C,ELECTROLYTIC	10UF STD 16V M
C101	1-162-294-31	C,TUBULA(HIGH DIELE)	1000PF 50V K	C1507	1-124-499-11	C,ELECTROLYTIC	1UF SRE 50V M
C1101	1-162-306-11	C,TUBULA(HIGH DIELE)	001MF 16V M	C1508	1-126-964-11	C,ELECTROLYTIC	10UF STD 16V M
C1102	1-162-306-11	C,TUBULA(HIGH DIELE)	001MF 16V M	C1509	1-162-286-31	C,TUBULA(HIGH DIELE)	220PF 50V K
C1103	1-101-004-00	C,CERAMIC(HIGH DIELE)	001MF 50V Z	1	1-102-280-31	C,TOBOLA(MON DIELE)	22011 30V K
C1107	1-106-351-00	C,POLYESTER(MYLAR)	2200pF 50V J	C1601	1-126-935-11	C,ELECTROLYTIC	470UF STD 16V M
C1108	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	C1602	9-939-588-01	C,ELECTROLYTIC	330UF STD 16V M
C1109	1-162-215-31	C,TUBULA(TC)	47PF 50V J	(20V)	1-126-933-11	C,ELECTROLYTIC	100UF STD 16V M
C1110	1-162-215-31	C,TUBULA(TC)	47PF 50V J	C1603	1-106-367-00	C,POLYESTER(MYLAR)	0 01U 100V K
C1112	1-124-902-00	C,ELECTROLYTIC	0 47UF STD 50V M	C1605	1-126-962-11	C,ELECTROLYTIC	3 3UF STD 50V M
				C1606	1-126-942-61	C,ELECTROLYTIC	1000UF STD 25V M
C1115	1-126-967-11	C,ELECTROLYTIC	47UF STD 16V M	C1607	1-124-903-11	C.ELECTROLYTIC	1UF STD 50V M
C1119	1-106-375-12	C,POLYESTER(MYLAR)	0 022MF 100V K	C1608	1-126-967-11	C,ELECTROLYTIC	47UF STD 16V M
C1120	9-939-279-01	C,ELECTROLYTIC	1MF 50V M	C1616	1-106-375-12	C,POLYESTER(MYLAR)	0 022MF 100V K
C1121	1-162-217-31	C,TUBULA(T C)	56P 50V J	C1627	1-106-371-00	C,POLYESTER(MYLAR)	0 015MF 100V K
C1128	1-126-963-11	C,ELECTROLYTIC	4 7UF STD 50V M	1	1 100 37 1 00	O, OBT BOTEK(MTE/IK)	0 0151111 100 7 11
C1131	1-162-197-31	CTUDAL ACTO	COD FOX IV	C1701	1-124-347-00	C,ELECTROLYTIC	100M SM 160V M
		C,TUBULA(TC)	6 8P 50V K	C18	1-126-786-11	C,ELECTROLYTIC	47UF 16V M
C1137 C1144	1-124-902-00	C,ELECTROLYTIC	0 47UF STD 50V M	C21	1-162-306-11	C,TUBULA(HIGH DIELE)	0 01MF 16V M
	1-124-903-11 9-939-389-01	C,ELECTROLYTIC	1UF STD 50V M	C213	1-126-157-11	C,ELECTROLYTIC	10UF 16V M
C1145 C1152	9-939-389-01	C,ELECTROLYTIC	1000UF STD 10V M	C22	1-124-499-11	C,ELECTROLYTIC	IUF SRE 50V M
C1132	9-939-291-01	C,POLYESTER(MYLAR)	0 1UF S 50V J	1 0220	1 126 706 11	C EL CORDO MANO	ATTE SALVA
C1153	1-126-768-11	C,ELECTROLYTIC	2200UF STD 16V M	C220	1-126-786-11	C,ELECTROLYTIC	47UF 16V M
C1155	1-126-933-11	C,ELECTROLYTIC	100UF STD 16V M	C221	1-126-157-11	C,ELECTROLYTIC	10UF 16V M
C1202	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	C223	1-126-157-11	C,ELECTROLYTIC	10UF 16V M
C1206	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	C224	1-162-306-11	C,TUBULA(HIGH DIELE)	0 01MF 16V M
C1207	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	C225	1-126-964-11	C,ELECTROLYTIC	10UF STD 16V M
				C227	1-126-157-11	C,ELECTROLYTIC	10UF 16V M
C1208	1-162-306-11	C,TUBULA(HIGH DIELE)	0 01MF 16V M	C229	1-126-157-11	C,ELECTROLYTIC	10UF 16V M
C1209	1-126-768-11	C,ELECTROLYTIC	2200UF STD 16V M	C23	1-162-306-11	C,TUBULA(HIGH DIELE)	0.01MF 16V M
(20V)	1-126-934-11	C,ELECTROLYTIC	220UF STD 16V M	C230	1-126-157-11	C,ELECTROLYTIC	10UF 16V M
C1210	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	C26	1-162-306-11	C,TUBULA(HIGH DIELE)	0 01MF 16V M
C1212	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	l I		,	
C1213	1-124-903-11	C,ELECTROLYTIC	THE CED COURT	C27	1-162-306-11	C,TUBULA(HIGH DIELE)	0 01MF 16V M
C1213	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	C28	1-162-306-11	C,TUBULA(HIGH DIELE)	0 01MF 16V M
C1214	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M	C29	1-126-786-11	C,ELECTROLYTIC	47UF 16V M
C1217	1-126-934-11	C,ELECTROLYTIC	1UF STD 50V M	C31	1-126-786-11	C,ELECTROLYTIC	47UF 16V M
C1219	1-126-934-11	C,ELECTROLYTIC	220UF STD 16V M 10UF 16V M	C32	1-124-465-00	C,ELECTROLYTIC	0 47UF 50V M
C1220	1-120-137-11	C,ELECTROLITIC	IOOL IOA MI	C33	9-939-394-01	C,GOLD CAP	47000MF/5 5V K
(20V)	1-126-794-11	C,ELECTROLYTIC	4 7UF 50V M	C37	1-162-306-11	C,TUBULA(HIGH DIELE)	0.01MF 16V M
C1251	1-104-792-51	C.ELECTROLYTIC	33UF 16V M	C37	1-162-306-11	C,TUBULA(HIGH DIELE)	0 01MF 16V M
C13	1-102-959-00	C,CERAMIC(TEMP COMP)		C36	1-162-294-31	C,TUBULA(HIGH DIELE)	1000PF 50V K
C14	1-102-959-00	C,CERAMIC(TEMP COMP)		C402	1-102-294-31	C.ELECTROLYTIC	47UF 16V M
		,	· ·	1	1 120-700-11	C,LLECTROLITIC	7/01 10V W

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
C405	1-161-494-00	C,TUBULA(HIGH DIELE)	22000P 25V Z F	C601	1-126-967-11	C,ELECTROLYTIC	47UF STD 16V M
C407	1-162-285-31	C,TUBULA(HIGH DIELE)	180PF 50V K	C602	1-106-367-00	C,POLYESTER(MYLA	R) 0 01U 100V K
C409	9-939-289-01	C,TUBULA(HIGH DIELE)	0 1M 50V Z	C603	1-106-367-00	C,POLYESTER(MYLA	R) 001U 100V K
C41	1-162-294-31	C,TUBULA(HIGH DIELE)	1000PF 50V K	C604	1-106-363-00	C,POLYESTER(MYLA	.R) 0 0068U 100V K
C411	1-126-786-11	C,ELECTROLYTIC	47UF 16V M	į			
				C605	1-106-375-12	C,POLYESTER(MYLA	R) 0 022MF 100V K
C413	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	C606	1-108-702-11	C,POLYESTER(MYLA	R) 0 068U 100V K
C416	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	C607	1-126-963-11	C,ELECTROLYTIC	4 7UF STD 50V M
C417	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	C608	1-124-903-11	C,ELECTROLYTIC	IUF STD 50V M
C420	1-126-301-11	C,ELECTROLYTIC	1UF 50V M	C609	1-126-963-11	C,ELECTROLYTIC	4 7UF STD 50V M
C424	1-106-375-12	C,POLYESTER	0 022UF 100V K	į			
				C610	1-162-286-31	C,TUBULA(HIGH DIE	
C425	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	C611	1-124-903-11	C,ELECTROLYTIC	1UF STD 50V M
C426	1-126-786-11	C,ELECTROLYTIC	47UF 16V M	C613	1-126-967-11	C,ELECTROLYTIC	47UF STD 16V M
C428	1-130-491-00	C,POLYESTER	0 047MF 50V K	C614	1-106-345-00	C,POLYESTER(MYLA	
C429	1-124-465-00	C,ELECTROLYTIC	0 47UF 50V M	C619	1-128-551-11	C,ELECTROLYTIC	22UF STD 16V M
C431	1-161-494-00	C,TUBULA(HIGH DIELE)	22000P 25V Z F	i			
			0.047777 5077 77	C632	1-137-401-11	C,METALPOLYESTER	
C432	1-130-483-00	- +	0 01UF 50V K	C634	1-126-935-11	C,ELECTROLYTIC	470UF STD 16V M
C433	1-126-301-11	C,ELECTROLYTIC	1UF 50V M	C636	1-106-343-00	C,POLYESTER(MYLA	
C434	1-126-301-11	C,ELECTROLYTIC	1UF 50V M	C637	1-106-367-00	C,POLYESTER(MYLA	
C436	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	C638	1-126-963-11	C,ELECTROLYTIC	4 7UF STD 50V M
C437	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	1		a at pamp of tarta	LOUIE CED 16W M
~	1 10/ 50/ 11	G EX ECTROL VITIG	ATTIE 16V.M	C639	1-126-964-11	C,ELECTROLYTIC	10UF STD 16V M 10UF STD 16V M
C44	1-126-786-11	C,ELECTROLYTIC	47UF 16V M	C640	1-126-964-11	C,ELECTROLYTIC	10UF 31D 16V M
C443	1-126-786-11	C,ELECTROLYTIC	47UF 16V M	C801	1-126-157-11	C,ELECTROLYTIC	47UF 16V M
C444	9-939-289-01	C,TUBULA(HIGH DIELE)	0 IM 50V Z	C805	1-126-786-11	C,ELECTROLYTIC	
C446	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	C807	9-939-291-01	C,POLYESTER(MYLA	(K) 0 10F 3 50V J
C447	1-162-306-11	C,TUBULA(HIGH DIELE)	001MF 16V M		1 106 157 11	C,ELECTROLYTIC	10UF 16V M
6440	1 160 015 01	C,TUBULA(TC)	47PF 50V J	C808	1-126-157-11 1-126-786-11	C,ELECTROLYTIC	47UF 16V M
C448	1-162-215-31 1-126-786-11	C,ELECTROLYTIC	47UF 16V M	C810 C811	9-939-291-01	C,POLYESTER(MYLA	
C450 C451	1-102-942-00	C,CERAMIC(TEMP COMP)		C811	1-130-493-00	C.POLYESTER	0 068MF 50V K
C451 C453	1-162-209-31	C,TUBULA(TC)	27PF 50V J	! C821	1-106-363-00	C,POLYESTER(MYLA	
C453	1-102-209-31	C,ELECTROLYTIC	1UF SRE 50V M	1 0021	1-100-303-00	C,I OLI DOI DA	111) 000011 5 5 0 1 1
C+5+	1-12-1-4/)-11	C,DEECTROBITIE	101 012 00 1 11	C841	1-126-786-11	C,ELECTROLYTIC	47UF 16V M
C456	1-124-257-00	C,ELECTROLYTIC	2 2UF 50V M	C843	1-126-301-11	C,ELECTROLYTIC	1UF 50V M
C457	1-126-786-11	C,ELECTROLYTIC	47UF 16V M	C844	9-939-396-01	C,CERAMIC(TEMP C	
C458	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	1 00.14	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		- /
C459	9-939-289-01	C,TUBULA(HIGH DIELE)	0 1M 50V Z			<diode></diode>	
C460	9-939-289-01	C,TUBULA(HIGH DIELE)	0 1M 50V Z	D10	8-719-815-85	DIODE	1S2471
				D10	8-719-815-85	DIODE	1S2471
C501	1-162-294-31	C,TUBULA(HIGH DIELE)	1000PF 50V K	D1202	8-719-300-33		TVR06J 0 6A/600V 250NS
C502	1-126-786-11	C,ELECTROLYTIC	47UF 16V M	D1202	8-719-815-85		1S2471
C503	1-126-301-11	C,ELECTROLYTIC	1UF 50V M	D1203	8-719-815-85	DIODE	182471
C506	1-130-483-00	C,POLYESTER	001UF 50V K	D1208	8-719-815-85	DIODE	1S2471
C508	9-939-290-01	C,POLYESTER(MYLAR)	0 033UF S 50V J	1			
				D1205	8-719-815-85	DIODE	1S2471
C509	1-126-301-11	C,ELECTROLYTIC	1UF 50V M	D21	8-719-815-85	DIODE	1S2471
C51	1-126-786-11	C,ELECTROLYTIC	47UF 16V M	D23	8-719-815-85	DIODE	182471
C511	1-162-294-31	C,TUBULA(HIGH DIELE)	1000PF 50V K	D401	8-719-815-85		182471
C515	9-939-290-01	C,POLYESTER(MYLAR)	0 033UF S 50V J	D402	8-719-815-85	DIODE	182471
C516	1-124-499-11	C,ELECTROLYTIC	1UF SRE 50V M	D.100	0.710.015.05	DIODE	1S2471
0515	1 120 400 00	C DOI VECTED	OUTTE SOU V	D403 D404	8-719-815-85 9-908-037-01	DIODE DIODE	SCHOTTKY,BAT 41
C517	1-130-483-00	C,POLYESTER	0 01UF 50V K	D404	8-719-815-85		1S2471
C518	1-124-257-00	C,ELECTROLYTIC	2 2UF 50V M	D403	8-719-815-85		1S2471 1S2471
C519	1-124-257-00		2 2UF 50V M 0 1UF 50V M	D400	8-719-815-85		1S2471
C521	1-124-463-00		4 7UF 50V M	1 5407	0 717 015 05	Diobb	
C523	1-126-794-11	C,ELECTROLYTIC	4 /OI 30V WI	D501	8-719-815-85	DIODE	1S2471
C524	1-126-157-11	C,ELECTROLYTIC	10UF 16V M	D502	8-719-815-85	DIODE	1S2471
C524	1-126-157-11	C,ELECTROLITIC C,ELECTROLYTIC	10UF 16V M	D503	8-719-815-85	DIODE	1S2471
C525	1-126-794-11	C,ELECTROLYTIC	4 7UF 50V M	L D506	8-719-815-85	DIODE	1S2471
C526 C527	1-126-794-11	C,ELECTROLYTIC	4 7UF 50V M	D507	8-719-815-85	DIODE	1S2471
C527	1-106-343-00		1000PF 50V K	į			
C329	1 100-040-00	C,I ODI LO IDI	LUJONA DOT AK	D508	8-719-815-85		182471
C530	1-104-792-51	C,ELECTROLYTIC	33UF 16V M	D509	8-719-815-85		182471
C532	1-126-514-11	C,ELECTROLYTIC	22UF 16V M	D510	8-719-815-85		1S2471
C534	1-162-306-11	C,TUBULA(HIGH DIELE)		D601	8-719-815-85		1S2471
C535	9-939-395-01	C,ELECTROLYTIC	0 4700UF SRE 50V M	D602	8-719-815-85	DIODE	1S2471
C537	1-106-351-00	·	2200PF S 50V J	Dott	9-939-292-01	DIODE	DS4148
/	. 322 00	,		D841 D842	9-939-292-01		DS4148
C538	1-124-465-00	C,ELECTROLYTIC	0 47UF 50V M	D842	9-939-292-01		DS4148
-				1 D043	> >>>-L>L-UI	21021	

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
D844	8-719-815-85	DIODE	1S2471	L204	1 410 513 11	INDUCTOR	22UH K
D845	8-719-815-85	DIODE	1S2471	L204 L401	1-410-513-11 1-410-509-11	INDUCTOR	10UH K
D846	8-719-815-85	DIODE	182471	L401 L402	1-410-518-11	INDUCTOR	56UH K
D847	8-719-815-85	DIODE	1S2471	L402	1-410-518-11	INDUCTOR	100UH K
D848	8-719-815-85	DIODE	182471	L404 L405	1-410-514-11	INDUCTOR,	27UH K
2010				1 1 100	1 110 51 1 11	n ib ce ron,	2,011 11
D849	8-719-815-85	DIODE	1S2471	L406	1-410-521-11	INDUCTOR	100UH K
ZD11	8-719-921-67	DIODE ZENER	MTZ8 2B	L407	1-410-513-11	INDUCTOR	22UH K
ZD1101	8-719-921-43	DIODE ZENER	MTZ5 1B	L408	1-410-513-11	INDUCTOR	22UH K
ZD12	8-719-921-82	DIODE ZENER	Z12BM TA	L409	1-410-513-11	INDUCTOR	22UH K
ZD1203	8-719-921-69	DIODE ZENER	MTZ9 1B	L410	1-410-515-11	INDUCTOR	33UH K
PT 12	0.710.021.42	DIODE ZENED	MT75 ID				40111117
ZD13	8-719-921-43	DIODE ZENER	MTZ5 1B	L411	1-410-512-11	INDUCTOR	18UH K
ZD14	8-719-921-43 8-719-921-69	DIODE ZENER DIODE ZENER	MTZ5 1B MTZ9 1B	L412	1-410-363-11	INDUCTOR	27UH K
	8-719-921-09	DIODE ZENER	MTZ6 8B	LA13	1-410-336-11	INDUCTOR	220UH K
	8-719-109-97	DIODE ZENER	MTZ9 1B	L501	1-410-514-11 1-410-521-11	INDUCTOR, INDUCTOR	27UH K 100UH K
2,01403	0-719-921-09	DIODE ZENEK	W1125 1B	L601	1-410-321-11	INDUCTOR	1000H K
ZD1406	8-719-921-69	DIODE ZENER	MTZ9 1B	L602	1-410-513-11	INDUCTOR	22UH K
ZD1506	8-719-921-43	DIODE ZENER	MTZ5 1B	L603	1-410-521-11	INDUCTOR	100UH K
ZD1602	8-719-921-80	DIODE ZENER	MTZ 11B	L605	1-410-511-11	INDUCTOR	15UH K
ZD1603	8-719-921 - 80	DIODE ZENER	MTZ 11B	L802	1-410-513-11	INDUCTOR	22UH K
ZD203	8-719-921-80	DIODE ZENER	MTZ 11B	L805	1-410-506-11	INDUCTOR	5 6UH K
ZD204	8-719-921-80	DIODE ZENER	MTZ 11B	L811	1-410-336-11	INDUCTOR	220UH K
ZD205	8-719-921-82	DIODE ZENER	Z12BM TA	L812	1-410-336-11	INDUCTOR	220UH K
ZD206	8-719-921-80	DIODE ZENER	MTZ 11B	L813	1-410-336-11	INDUCTOR	220UH K
ZD207 ZD24	8-719-921-80 8-719-921-82	DIODE ZENER DIODE ZENER	MTZ 11B Z12BM TA	L814	1-410-336-11	INDUCTOR	220UH K
2,024	0-719-921-02	DIODE ZENEK	ZIZBW IA	T601	9-939-342-01	COIL	VAR,07S 6F 252KHZ
		<ic></ic>		1		<connec< td=""><td>CTOR></td></connec<>	CTOR>
IC10	9-939-295-01	IC, MOTOROLA	MC144110	P01	9-939-400-01	CONNECTOR A	SSY 3P (L=150) TO MF-R P01-A
IC11	9-939-296-01	•	L7445 10SIP BI-MOTOR DRIVER	P04	9-939-401 - 01		SSY 7P (L=200) TO MF-L P04-A
IC14	9-939-298-01	•	7033P 3P 3 3V RESET	P11	9-939-324-01		SSY 15(3/12)P TO HC02/PD501
IC15	8-759-251-04	·	4C02-10PC 8D EEPROM(2K,IIC) 325AN 56SD NTSC 1 CHIP(MONO	P508	9-939-329-01	CONNECTOR A	SSY 15P TO PJM01
IC1501	9-939-299-01	IC, IOSHIBA IA80	SZJAN JOSE NISC I CHIPIMONO				
			•	1		<transi< td=""><td>STOR></td></transi<>	STOR>
IC16	9-939-300-01	IC.MITSUBISHI I		 		<transi< td=""><td></td></transi<>	
IC16 IC17	9-939-300-01 9-939-298-01			Q10	9-939-330-01	TRANSISTOR	KRC103M(AT) TO-92M TP KEC
IC17	9-939-300-01 9-939-298-01 8-759-822-60	IC,KEC KIA7	LG8658-02A(M38185ME-171FP) 7033P 3P 3 3V RESET	Q11	9-939-330-01	TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC
	9-939-298-01	IC,KEC KIA7 IC, SANYO LA7		Q11 Q1102	9-939-330-01 8-729-281-53	TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201	9-939-298-01 8-759-822-60	IC,KEC KIA7 IC,SANYO LA7 IC,SANYO LC79	.G8658-02A(M38185ME-171FP) 7033P 3P 3 3V RESET 222 (1280 AUDIO)	Q11 Q1102 Q12	9-939-330-01 8-729-281-53 9-939-330-01	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC
IC17 IC201 IC401 IC402	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01	IC,KEC KIA7 IC,SANYO LA7 IC,SANYO LC79 IC,SANYO LA74	.G8658-02A(M38185ME-171FP) 7033P 3P 3 3V RESET 222 (1280 AUDIO) 775J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR)	Q11 Q1102	9-939-330-01 8-729-281-53	TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01	IC,KEC KIAZ IC,SANYO LA7 IC,SANYO LA72 IC,HITACHI HD4	.G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO	Q11 Q1102 Q12 Q1201	9-939-330-01 8-729-281-53 9-939-330-01	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC
IC17 IC201 IC401 IC402 IC501	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01	IC,KEC KIA7 IC,SANYO LA7 IC,SANYO LA72 IC,HITACHI HD4	LG8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 9756NT 56SD 4HD SERVO	Q11 Q1102 Q12	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01	IC,KEC KIA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4	LG8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO	Q11 Q1102 Q12 Q1201 Q1202	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01	IC,KEC KIAT IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO	Q11 Q1102 Q12 Q1201 Q1202 Q1203	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TÖ-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01	IC,KEC KIAZ IC, SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,ZILOG Z86 IC,MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 1756NT 56SD 4HD SERVO	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-140-96	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTA1270-TP-Y (KTA562TM)KEC
IC17 IC201 IC401 IC402 IC501	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01	IC,KEC KIAT IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 1756NT 56SD 4HD SERVO	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3197,TP(KTC388A),KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC801 IC802	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01	IC,KEC KIAT IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IS SECULATION IC,MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 129756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 135041-065FP 20SOP OSD	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 9-939-331-01 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3197,TP(KTC388A),KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SIC,SANYO LA7 IC,HITACHI HD4 ISSUE SERVICO Z86 IC,MITSUBISHI JACK: J	.G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 12756NT 56SD 4HD SERVO 129756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 135041-065FP 20SOP OSD	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3197,TP(KTC388A),KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC801 IC802	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01	IC,KEC KIAT IC, SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,ZILOG Z86 IC,MITSUBISHI <jack:< td=""><td>.G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 12756NT 56SD 4HD SERVO 129756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 135041-065FP 20SOP OSD</td><td>Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502</td><td>9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53</td><td>TRANSISTOR TRANSISTOR /td><td>KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3197,TP(KTC388A),KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC</td></jack:<>	.G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 12756NT 56SD 4HD SERVO 129756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 135041-065FP 20SOP OSD	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3197,TP(KTC388A),KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SIC,SANYO LA7 IC,HITACHI HD4 ISSUE SERVICO Z86 IC,MITSUBISHI JACK: J	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 125756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 12912PSC(CAPTION)DIP 18P 135041-065FP 20SOP OSD AV FOR SONY 12912PSC,YL,AUDIO;BK	Q11 Q1102 Q12 Q1201 Q1203 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502 Q1503	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTA1270-TP-Y (KTA562TM)KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-307-01 9-939-308-01 9-939-309-01 9-939-310-01	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LC75 IC,SANYO LA72 IC,HITACHI HD4 IC,HITACHI H	.G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 125 36SD Y/C(NTSC, VCR) 129756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 12912PSC(CAPTION)DIP 18P 135041-065FP 20SOP OSD AV FOR SONY 16O;YL,AUDIO;BK	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3197,TP(KTC388A),KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC802 IC801 IC802	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-908-973-01	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,HITACHI SEBIOLE IC,MITSUBISHI JACK,EARPHONE JACK,RCA 2P VIE COIL	.G8658-02A(M38185ME-171FP) 1033P 3 P 3 V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 19756NT 56SD 4HD SERVO 125 36SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 12912PSC(CAPTION)DIP 18P 135041-065FP 20SOP OSD 14AV FOR SONY 15EO;YL,AUDIO;BK 15DELAY LINE 48NS 3 58T	Q11 Q1102 Q12 Q1201 Q1203 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502 Q1503	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTC3198-TP-Y (KTC1815)KEC KTA1270-TP-Y (KTA562TM)KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC802 IC801 IC802 JK101 JK102	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-908-973-01 9-939-293-01	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4		Q11 Q1102 Q12 Q1201 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502 Q1503 Q1504	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-514-11	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,HITACHI Z86 IC,MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 19756NT 56SD 4HD SERVO 19756NT 56SD 4HD 56SD 4HD SERVO 19756NT 56SD 4HD 56D 4HD 56SD 4HD 56D 4HD	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502 Q1503 Q1504 Q1504	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,ZILOG Z86 IC,MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 1033P 3P 3 3V RESET 1035P 3P	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1552 Q1501 Q1502 Q1503 Q1504 Q1504 Q1521 Q201 Q202	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-514-11	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,HITACHI Z86 IC,MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 19756NT 56SD 4HD SERVO 19756NT 56SD 4HD 56SD 4HD SERVO 19756NT 56SD 4HD 56D 4HD 56SD 4HD 56D 4HD	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1252 Q1501 Q1502 Q1503 Q1504 Q1504	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,ZILOG Z86 IC,MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 1033P 3P 3 3V RESET 1035P 3P	Q11 Q1102 Q12 Q1201 Q1203 Q1205 Q1206 Q1241 Q1501 Q1502 Q1503 Q1504 Q1522 Q1501 Q1502 Q1520 Q1520 Q201 Q201 Q202	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-307-01 9-939-308-01 9-939-309-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11 9-939-311-01 9-939-399-01 1-410-363-11	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,HITACHI SANYO IC,KILOG Z86 IC,MITSUBISHI	CG8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 10756NT 56SD 4HD SERVO 10756NT 56SD 4HD 56SD 4HD SERVO 10756NT 56SD 4HD 5	Q11 Q1102 Q12 Q1201 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1521 Q201 Q202 Q203	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107 L1110	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11 9-939-311-01 9-939-399-01 1-410-363-11 9-939-312-01	IC,KEC IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, HITACHI IC, SANYO IC, HITACHI IC, SANYO IC, HITACHI IC, SANYO IC, S	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 1033E 103E 103E 103E 103E 103E 103E 103E	Q11 Q1102 Q12 Q1201 Q1203 Q1205 Q1206 Q1241 Q1501 Q1502 Q1503 Q1504 Q1521 Q201 Q202 Q203 Q401 Q401	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107 L1110 L1111	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-513-11 9-939-311-01 9-939-399-01 1-410-363-11 9-939-312-01 1-410-511-11	IC,KEC KIAC IC, SANYO LA7 IC,SANYO LA7 IC,SANYO LA7 IC,SIC, SANYO LA7 IC,HITACHI HD4 IC,HITACHI HD4 IC,ZILOG Z86 IC,MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 19756NT 56SD 4HD 56SD 4HD SERVO 19756NT 56SD 4	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC801 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107 L1110	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11 9-939-311-01 9-939-399-01 1-410-363-11 9-939-312-01	IC,KEC IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, HITACHI IC, SANYO IC, HITACHI IC, SANYO IC, HITACHI IC, SANYO IC, S	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 1033E 103E 103E 103E 103E 103E 103E 103E	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403 Q404	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTA1266-TP-Y (KTA1015) KEC KTA1266-TP-Y (KTA1015) KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107 L1110 L1111 L1113	9-939-298-01 8-759-822-60 1-809-389-11 9-939-305-01 9-939-307-01 9-939-308-01 9-939-309-01 9-939-310-01 9-908-973-01 9-939-293-01 1-410-514-11 1-410-363-11 9-939-312-01 1-410-511-11 1-410-511-11	IC,KEC KIAC IC, SANYO LA7 IC, SANYO LA7 IC, SANYO LA7 IC, SANYO LA7 IC, HITACHI HD4 IC, SANYO LA7	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 125 36SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 12912PSC(CAPTIO	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L1105 L1107 L1110 L1111 L1113	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11 9-939-312-01 1-410-511-11 1-410-511-11	IC,KEC KIAC IC, SANYO LA7 IC, SANYO LA7 IC, SANYO LA7 IC, SANYO LA7 IC, HITACHI HD4 IS SECTION Z86 IC, MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 19756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 12912PSC	Q11 Q1102 Q12 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403 Q404	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC KTA1266-TP-Y (KTA1015) KEC KTA1266-TP-Y (KTA1015) KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107 L1110 L1111 L1113 L1114 L1201	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-309-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11 9-939-311-01 9-939-391-01 9-939-311-01 1-410-511-11 1-410-511-11 1-410-511-11	IC,KEC IC, SANYO	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 10756NT 56SD 4HD SERVO 10756NT 56SD 4HD 56SD 4HD SERVO 10756NT 56SD 4HD 56	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1504 Q1504 Q1502 Q201 Q202 Q203 Q401 Q402 Q403 Q404 Q405	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 IK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107 L1110 L1111 L1113 L1114 L1201 (20V)	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-310-01 9-939-310-01 9-939-293-01 1-410-513-11 9-939-311-01 9-939-399-01 1-410-363-11 9-939-312-01 1-410-511-11 1-410-511-11 1-410-511-11	IC,KEC KIAC IC, SANYO LA7 IC, SANYO LA7 IC, SANYO LA7 IC, SANYO LA7 IC, HITACHI HD4 IS SECTION Z86 IC, MITSUBISHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC, VCR) 19756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 12912PSC	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403 Q404 Q405 Q406 Q408 Q409	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1102 L1105 L1107 L1110 L1111 L1113 L1114 L1201	9-939-298-01 8-759-822-60 1-809-389-11 9-939-304-01 9-939-305-01 9-939-307-01 9-939-308-01 9-939-309-01 9-939-310-01 9-939-293-01 1-410-514-11 1-410-513-11 9-939-311-01 9-939-391-01 9-939-311-01 1-410-511-11 1-410-511-11 1-410-511-11	IC,KEC IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, HITACHI IC, HITAC	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 10756NT 56SD 4HD SERVO 10756NT 56SD 4HD 56SD 4HD SERVO 10756NT 56SD 4HD 56	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1504 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403 Q404 Q405 Q408 Q409 Q501	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-281-53 8-729-201-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1105 L1107 L1110 L1111 L1113 L1114 L1201 (20V) L1221 L1222	9-939-298-01 8-759-822-60 1-809-389-11 9-939-305-01 9-939-307-01 9-939-308-01 9-939-309-01 9-939-310-01 9-939-310-01 9-939-311-01 9-939-311-01 9-939-311-01 9-939-311-01 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11 1-939-314-01 9-939-315-01	IC,KEC IC, SANYO	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 12912PSC(CAPTION)DIP 18P 12918 1	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403 Q404 Q405 Q406 Q408 Q409	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-201-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC
IC17 IC201 IC401 IC402 IC501 IC802 IC801 IC802 JK101 JK102 DL1204 FL601 J262 L10 L1105 L1107 L1110 L1111 L1113 L1114 L1201 (20V) L1221	9-939-298-01 8-759-822-60 1-809-389-11 9-939-305-01 9-939-307-01 9-939-308-01 9-939-309-01 9-939-310-01 9-939-310-01 9-939-311-01 9-939-311-01 9-939-311-01 9-939-311-01 1-410-513-11 9-939-312-01 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11 1-410-511-11	IC,KEC IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, SANYO IC, HITACHI	G8658-02A(M38185ME-171FP) 1033P 3P 3 3V RESET 222 (1280 AUDIO) 175J 14D CCD 1H D/LINE(NTSC 125 36SD Y/C(NTSC,VCR) 19756NT 56SD 4HD SERVO 1033E 103E 103E 103E 103E 103E 103E 103E	Q11 Q1102 Q1201 Q1202 Q1203 Q1205 Q1206 Q1241 Q1502 Q1501 Q1502 Q1503 Q1504 Q1504 Q1504 Q1521 Q201 Q202 Q203 Q401 Q402 Q403 Q404 Q405 Q408 Q409 Q501	9-939-330-01 8-729-281-53 9-939-330-01 8-729-281-53 8-729-281-53 8-729-140-96 8-729-281-53 9-939-331-01 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-201-53 8-729-281-53 8-729-201-53 8-729-201-53 8-729-281-53 8-729-201-53	TRANSISTOR	KRC103M(AT) TO-92M TP KEC KTC3198-TP-Y (KTC1815)KEC

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
Q504	8-729-281-53	TRANSISTOR KTC3198	-TP-Y (KTC1815)KEC	R1218	1-247-854-11	R,CARBON FILM	9 1K 1/6W 5
Q504 Q505	9-939-404-01		M(AT) TO-92M TP KEC	(20V)	1-249-429-11	R,CARBON FILM	10K 1/6W 5
Q506	8-729-281-53	TRANSISTOR KTC3198	-TP-Y (KTC1815)KEC	R1219	1-247-854-11	R,CARBON FILM	9 1K 1/6W 5
Q507	8-729-281-53		-TP-Y (KTC1815)KEC	R1221	1-249-433-11	R,CARBON FILM	20K 1/6W 5
Q508	8-729-281-53	TRANSISTOR KTC3198	-TP-Y (KTC1815)KEC	R1222	1-214-840-00	R,CARBON FILM	100 1/2W 5
Q601	8-729-803-86	TRANSISTOR KTC3205	-Y (KTC2236A) TP KEC	R1223	1-249-438-11	R,CARBON FILM	56K 1/6W 5
Q603	9-939-330-01		M(AT) TO-92M TP KEC	(20V)	1-249-434-11	R,CARBON FILM	27K 1/6W 5
Q605	8-729-803-86		-Y TP(KTA966A) KEC	R1224	1-247-883-11	R,CARBON FILM	150K 1/6W 5 100K 1/6W 5
Q606 Q801	9-939-330-01 8-729-281-53		M(AT) TO-92M TP KEC -TP-Y (KTC1815)KEC	(20V) R1225	1-249-441-11 1-249-426-11	R,CARBON FILM R,CARBON FILM	5 6K 1/6W 5
Q 001	0 727 201 55			1			
Q802	8-729-281-53		-TP-Y (KTC1815)KEC	R1228	1-249-434-11	R,CARBON FILM	27K 1/6W 5 2 2K 1/6W 5
Q803 Q804	8-729-281-53 9-939-330-01		-TP-Y (KTC1815)KEC M(AT) TO-92M TP KEC	R1229 R1230	1-249-421-11 1-249-436-11	R,CARBON FILM R,CARBON FILM	2 2K 1/6W 5 39K 1/6W 5
Q841	8-729-281-53		-TP-Y (KTC1815)KEC	(20V)	1-249-433-11	R,CARBON FILM	22K 1/6W 5
Q842	8-729-281-53	TRANSISTOR KTC3198		R1236	1-249-423-11	R,CARBON FILM	3 3K 1/6W 5
		<resistor></resistor>		 D1027	1-249-423-11	R,CARBON FILM	3 3K 1/6W 5
				R1237 R1238	1-249-423-11	R,CARBON FILM	3 3K 1/6W 5
FR1611	1-211-771-11	R,FUSIBLE	47 1/2W 5	(20V)	1-259-454-11	R,CARBON FILM	12K 1/6W 5
R1 R10	1-249-421-11 1-247-815-91	R,CARBON FILM R,CARBON FILM	2 2K 1/6W 5 220 1/6W 5	R1239	1-249-424-11	R,CARBON FILM	3 9K 1/6W 5
R100	1-249-429-11	R,CARBON FILM	10K 1/6W 5	(20V)	1-249-429-11	R,CARBON FILM	10K 1/6W 5
R101	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R1251	1-249-435-11	R,CARBON FILM	33K 1/6W 5
		n ounnout EWA	1017 116117 5	R1252	1-249-427-11	R,CARBON FILM	6 8K 1/6W 5
R102	1-249-429-11 1-249-417-11	R,CARBON FILM R,CARBON FILM	10K 1/6W 5 1 0K 1/6W 5	R1253	1-249-428-11	R,CARBON FILM	8 2K 1/6W 5
R103 R104	1-249-417-11	R,CARBON FILM	10K 1/6W 5	(20V)	1-249-433-11	R,CARBON FILM	22K 1/6W 5
R105	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R1256	1-215-860-11	R,METAL FILM OXIDE	33 1W 5%
R106	1-249-417-11	R,CARBON FILM	10K 1/6W 5	R1260	9-939-334-01	R,METAL FILM OXIDE	330 1/2W 5
70.1.07	1 240 421 11	D CARRON EII M	2 2K 1/6W 5	R127	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R107 R108	1-249-421-11 1-249-417-11	R,CARBON FILM R,CARBON FILM	1 0K 1/6W 5	R1270	1-249-405-11	R,CARBON FILM	100 1/6W 5
R109	1-249-435-11	R,CARBON FILM	33K 1/6W 5	R13	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5 68K 1/6W 5
R11	1~247-815-91	R,CARBON FILM	220 1/6W 5	R131	1-249-439-11	R,CARBON FILM	08K 1/0W 3
R110	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R14	1-249-441-11	R.CARBON FILM	100K 1/6W 5
R1103	1-249-425-11	R,CARBON FILM	47K 1/6W 5	X14011		A CARBON PLAN	\$ 28 S S S S S S S S S S S S S S S S S S
R1105	1-249-836-11	R,CARBON FILM	1 6K 1/6W 5	R1403	1-247-818-11	K,CARBON FILM R,CARBON FILM	300 1/6W 5 270 1/6W 5
R1107	1-249-411-11	R,CARBON FILM	330 1/6W 5	R1407	1-249-410-11 1-249-413-11	R,CARBON FILM	470 1/6W 5
R111	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5 240 1/6W 5		1200 000 00	,	
R1111	1-247-816-11	R,CARBON FILM	240 1/044 3	R143	1-214-840-00	R,CARBON FILM	100 1/2W 5
R1118	1-249-425-11	R,CARBON FILM	47K 1/6W 5	R1501	1-215-860-11	R,METAL FILM OXIDE R,METAL FILM OXIDE	33 1W 5% 39 1W 5%
R1119	1-247-858-11	R,CARBON FILM	13K 1/6W 5	(20V) R1503	1-216-424-11 1-249-413-11	R,CARBON FILM	470K 1/6W 5
R112	1-249-435-11 1-247-852-11	R,CARBON FILM R,CARBON FILM	33K 1/6W 5 7.5K 1/6W 5	(20V)	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R1122 R1123	1-247-848-11	R,CARBON FILM	5 1K 1/6W 5			n al province	000 1/0W F
		,		R1508 R1521	9-939-408-01 9-939-589-01	R,CARBON FILM R,CARBON FILM	220 1/2W 5 3 6K 1/6W 5
R1124	1-249-428-11	R,CARBON FILM	8 2K 1/6W 5	(20V)	1-249-433-11	R,CARBON FILM	22K 1/6W 5
R1126 R1129	1-249-417-11 1-249-385-11	R,CARBON FILM R,CARBON FILM	1 0K 1/6W 5 2 2 1/6W 5	R1522	1-249-435-11	R,CARBON FILM	33K 1/6W 5
R1123	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R1523	1-247-854-11	R,CARBON FILM	9 1K 1/6W 5
R1130	9-939-405-01	R,METAL FILM OXIDE	180 IW 5%	R1526	1-249-437-11	R.CARBON FILM	47K 1/6W 5
D.1101	1 240 417 11	D CADDON EU M	1 0K 1/6W 5	R1527	1-249-433-11	R,CARBON FILM	20K 1/6W 5
R1131 R1137	1-249-417-11 1-247-800-11	R,CARBON FILM R,CARBON FILM	51 1/6W 5	(20V)	1-247-866-11	R,CARBON FILM	30K 1/6W 5
R114	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R1530	1-247-842-11	R,CARBON FILM	3 0K 1/6W 5 12K 1/6W 5
R115	1-249-429-11	R,CARBON FILM	10K 1/6W 5	(20V)	1-259-454-11	R,CARBON FILM	12K 1/6W 5
R1166	1-249-413-11	R,CARBON FILM	470 1/6W 5	R1531	1-249-431-11	R,CARBON FILM	15K 1/6W 5
R118	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R1535		R,CARBON FILM	10K 1/6W 5
R119	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	R1601	9-939-409-01	R,METAL FILM OXIDE	68 1W 5% 10K 1/6W 5
R12	1-249-424-11	R,CARBON FILM	3 9K 1/6W 5	R1603	1-249-429-11	R,CARBON FILM	308, 1000 3
R120	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	- ; 3000 2002000	***		
R1200	9-939-406-01	R,CARBON FILM	680K 1/6W 5	· contraction and contraction of the contraction of	A 9 939 410 01		\$3,47 2% \$
R1201	1-249-413-11	R,CARBON FILM	470 1/6W 5	R1607		-	9 fK 1/6W 5 1 5K 1/6W 5
R1203	1-247-838-00		2 0K 1/6W 5	R1614			560 1/2W 5
R1205 R1207	1-249-426-11 1-247-852-11	R,CARBON FILM R,CARBON FILM	5 6K 1/6W 5 7 5K 1/6W 5	R1619			5 6K 1/6W 5
R1207	1-249-439-11	R,CARBON FILM	68K 1/6W 5	1 	1 240 410 11	D CADDON FILM	270 1/6W 5
				R18	1-249-410-11 1-247-815-91		270 1/6W 5 220 1/6W 5
R1209	1-249-423-11	R,CARBON FILM	3 3K 1/6W 5	R182	1-247-815-91		220 1/6W 5
R121 R1211	1-249-417-11 1-249-413-11	R,CARBON FILM R,CARBON FILM	1 0K 1/6W 5 470 1/6W 5	R183	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R1211	1-249-836-11		1 6K 1/6W 5	R19	1-249-410-11	R,CARBON FILM	270 1/6W 5
R1213	1-249-836-11	R,CARBON FILM	1 6K 1/6W 5	R2	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5
R1216	1-249-431-11	R,CARBON FILM	15K 1/6W 5	R20	1-249-410-11		270 1/6W 5
(20V)	1-259-454-11	R,CARBON FILM	12K 1/6W 5	R21	1-247-815-91	•	220 1/6W 5

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
R22	1-247-815-91	R,CARBON FILM	220 1/6W 5	R61	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R220	1-249-441-11	R,CARBON FILM	100K 1/6W 5	R612	1-249-401-11	R,CARBON FILM	47 1/6W 5
R221	1-249-437-11	R,CARBON FILM	47K 1/6W 5	R614	1-249-404-11	R,CARBON FILM	82 1/6W 5
R229	1-249-389-11	R,CARBON FILM	4 7 1/6W 5	R62	1-249-426-11	R,CARBON FILM	5 6K 1/6W 5
		•		R625	1-249-435-11	R,CARBON FILM	33K 1/6W 5
R23	1-247-815-91	R,CARBON FILM	220 1/6W 5				
R26	1-249-439-11	R,CARBON FILM	68K 1/6W 5	R63	1-247-815-91	R,CARBON FILM	220 1/6W 5
R28	1-249-439-11	R,CARBON FILM	68K 1/6W 5	R632	1-249-436-11	R,CARBON FILM	39K 1/6W 5
R31	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5	R638	1-249-435-11	R,CARBON FILM	33K 1/6W 5
R35	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	R639	1-249-393-11	R,CARBON FILM	10 1/6W 5
				R64	1-247-815-91	R,CARBON FILM	220 1/6W 5
R36	1-247-815-91	R,CARBON FILM	220 1/6W 5	į		n a innoview i	10 1/07/ 5
R38	1-249-438-11	R,CARBON FILM R,CARBON FILM	56K 1/6W 5 220 1/6W 5	R645	1-249-393-11	R,CARBON FILM	10 1/6W 5 22 1/6W 5
R39 R4	1-247-815-91 1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	R65	1-247-791-91 1-247-815-91	R,CARBON FILM R,CARBON FILM	220 1/6W 5
R40	1-247-815-91	R,CARBON FILM	220 1/6W 5	R67	1-247-815-91	R,CARBON FILM	220 1/6W 5
14-0	1 247 013 71	R,C/MDO// 11DM	220 17011 3	R69	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5
R409	1-249-425-11	R,CARBON FILM	4 7K 1/6W 5	1 100	1 217 121 11	R,C/MDO// 12D//	
R41	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	R70	1-249-425-11	R,CARBON FILM	47K 1/6W 5
R415	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5	R71	1-249-425-11	R,CARBON FILM	47K 1/6W 5
R419	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R74	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R421	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	R75	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
				R76	1-249-425-11	R,CARBON FILM	4 7K 1/6W 5
R423	1-249-423-11	R,CARBON FILM	3 3K 1/6W 5	İ			
R431	1-249-418-11	R,CARBON FILM	1 2K 1/6W 5	R77	1-249-425-11	R,CARBON FILM	4 7K 1/6W 5
R432	1-249-431-11	R,CARBON FILM	15K 1/6W 5	R78	9-939-339-01	R,METAL FILM OXID	
R434	1-259-418-11	R,CARBON FILM	390 1/6W 5	R79	9-939-339-01	R,METAL FILM OXID	
R435	1-249-425-11	R,CARBON FILM	47K 1/6W 5	R80	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
D 407	1 240 420 11	D CARDON PH M	10V 1/6W 5	R806	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R437	1-249-429-11	R,CARBON FILM	10K 1/6W 5 220 1/6W 5	Dote	1 240 417 11	D CARDON EU M	1 0K 1/6W 5
R48	1-247-815-91 1-249-417-11	R,CARBON FILM R,CARBON FILM	1 0K 1/6W 5	R815	1-249-417-11 1-249-417-11	R,CARBON FILM R,CARBON FILM	1.0K 1/6W 5
R5 R501	1-249-417-11	R,CARBON FILM	10K 1/6W 5	R816	1-249-441-11	R,CARBON FILM	1.0K 1/6W 5
R502	1-249-429-11	R,CARBON FILM	2 2K 1/6W 5	R823	1-249-441-11	R,CARBON FILM	10K 1/6W 5
1002	1-247-421-11	K,C/ KKBOIT I IIA	2211 7000 3	R827	1-214-753-00	R,METAL FILM	10K 1/6W 1
R503	1-249-431-11	R,CARBON FILM	15K 1/6W 5	i ROZ/	1 214 755 00	K,METHET KEM	1011 11011 1
R504	1-249-441-11	R,CARBON FILM	100K 1/6W 5	R842	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5
R505	1-249-441-11	R,CARBON FILM	100K 1/6W 5	R846	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R506	1-249-434-11	R,CARBON FILM	27K 1/6W 5	R847	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R507	1-249-435-11	R,CARBON FILM	33K 1/6W 5	R848	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
				R849	1-249-423-11	R,CARBON FILM	3 3K 1/6W 5
R508	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5				
R509	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	R850	1-249-429-11	R,CARBON FILM	10K 1/6W 5
R510	1-249-414-11	R,CARBON FILM	560 1/6W 5	R856	1-249-437-11	R,CARBON FILM	47K 1/6W 5
R511	1-249-414-11	R,CARBON FILM	560 1/6W 5	R857	1-247-887-00	R,CARBON FILM	220K 1/6W 5
R513	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	R858	1-249-429-11	R,CARBON FILM	10K 1/6W 5
n#10	1 240 426 11	D CADDON EILM	5 6K 1/6W 5	R859	1-249-429-11	R,CARBON FILM	10K 1/6W 5
R518	1-249-426-11 1-249-417-11	R,CARBON FILM R,CARBON FILM	1 0K 1/6W 5	i I D 00	1 240 412 11	D CADDON EILM	470 1/6W 5
R519 R521	1-247-897-11	R,CARBON FILM	560K 1/6W 5	R89 R90	1-249-413-11 1-249-417-11	R,CARBON FILM R,CARBON FILM	1 0K 1/6W 5
R523	1-259-454-11	R,CARBON FILM	12K 1/6W 5	R91	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R524	1-249-432-11	R,CARBON FILM	18K 1/6W 5	R91	1-247-815-91	R.CARBON FILM	220 1/6W 5
11021		,		R93	1-247-815-91	R,CARBON FILM	220 1/6W 5
R525	1-249-433-11	R,CARBON FILM	22K 1/6W 5				
R529	1-249-436-11	R,CARBON FILM	39K 1/6W 5	1 R94	1-247-815-91	R,CARBON FILM	220 1/6W 5
R53	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5	R95	1-247-815-91	R,CARBON FILM	220 1/6W 5
R532	1-247-881-00	R,CARBON FILM	120K 1/6W 5	R96	1-247-815-91	R,CARBON FILM	220 1/6W 5
R538	1-249-414-11	R,CARBON FILM	560 1/6W 5	R97	1-247-815-91	R,CARBON FILM	220 1/6W 5
				R98	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R539	1-249-414-11	R,CARBON FILM	560 1/6W 5	İ			
R544	1-249-437-11	R,CARBON FILM	47K 1/6W 5	R99	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5
R545	1-249-441-11	R,CARBON FILM	100K 1/6W 5	,	1 1-241-763-11	*	RH0638CS3R2HB B472
R546	1-249-426-11	R,CARBON FILM	5 6K 1/6W 5		1-238-016-11	*	RH0638C14R31B B103
R547	1-249-436-11	R,CARBON FILM	39K 1/6W 5	1	6 9-939-415-01	R,SEMI-FIX(H) R,HORI	EVN-DJAA03 B103 RH0638C14R31B B103
R550	1-249-425-11	R,CARBON FILM	47K 1/6W 5	VK143	31 1-238-016-11	к,покі	KIIOOOOCITKOID DIOO
R552	1-247-903-00		1 0M 1/6W 5	VR401	9-939-343-01	R,HORI	RH0638C13R2DB B102
R532	1-249-425-11	R,CARBON FILM	47K 1/6W 5	VR401		R,SEMI-FIX(H)	EVN-DJAA03 B104
R59	1-249-441-11	R,CARBON FILM	100K 1/6W 5	VR501			EVN-DJAY03 B204
R60	1-249-417-11	R,CARBON FILM	1 0K 1/6W 5	1			
				1		<switch:< td=""><td>></td></switch:<>	>
R606	1-249-393-11	R,CARBON FILM	10 1/6W 5	SW11	1-571-532-21	SWITCH	TACT VERT
R609	1-249-425-11	R,CARBON FILM	47K 1/6W 5	SW12	1-571-532-21		TACT VERT
				1			

REF NO	PART NO	DESCRIPTION		REMARK	REF NO	PART NO	DESCRIPTION	REMARK
SW13	1-571-532-21	SWITCH		VERT	C1815		C,ELECTROLYTIC	220UF STD 160V M
SW14	-			VERT	C1816		C,ELECTROLYTIC	100UF STD 100V M
SW15	1-571-532-21 9-908-991-01	SWITCH		VERT P12T21	C1817 C1818		C,CERAMIC(HIGH D	IELE) 1200P 500V K 2200UF STD 35V M
2 W 1301		MISCELLANI		1	C1819		C,ELECTROLYTIC	1000UF STD 25V M
THUM	9-939-340-01	TUNER		19-A07A	C1820	1-165-127-11	C,CERAMIC(HIGH D	IELE) 470PF 500V K
X10	9-939-345-01	FILTER		00MGW-TF01	C1821			IELE) 470PF 500V K
X11	9-939-346-01	CRYSTAL	32 768	0KHZ +-10PPM	C1822 C1823		C,ELECTROLYTIC C,ELECTROLYTIC	470UF STD 35V M 2200UF STD 35V M
X1401		FILTER		CSB503F30 503 5	C1823		C.ELECTROLYTIC	10UF STD 50V M
X1501	9-939-347-01	CRYSTAL	3 5795	45 16PF 90 OHM				
X401	9-939-348-01	CRYSTAL	3 5795	45 90 OHM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	9.939-433-61	C.DE7138	F & C & S & S & S & S & S & S & S & S & S
Z1101	9-939-349-01	FILTER	SAW,N	11958M	C1826 C1827	1-106-220-00 1-106-367-00	C,POLYESTER(MYLA C,POLYESTER(MYLA	
Z1102		FILTER		LTER SFSH4 5MCB-TF21	C1827	9-939-287-01	C POLYESTER(MYL	
Z1103	9-939-351-01	FILTER	TRAP	TPS4 5MC-TF21		9-939-423-83	CDETIX	*********
	* 0.020	462 OL D. MOUNT CON	ADI ETE	(1237)	G1001	1 126 062 11	a EL EGEDALVEIG	4 7UF STD 50V M
		462-01 D MOUNT CON 359-01 D MOUNT CON			C1831 C1832	1-126-963-11 9-909-477-01	C,ELECTROLYTIC C,DE1710-798	4700PF 1K K
	9-939-				C1832	1-126-934-11	C,ELECTROLYTIC	220UF STD 16V M
		::::::::	:::::	!	C1834	1-104-664-11	C,ELECTROLYTIC	47UF STD 25V M
		<capacito< td=""><td>R></td><td></td><td>C1835</td><td>1-126-934-11</td><td>C,ELECTROLYTIC</td><td>220UF STD 16V M</td></capacito<>	R>		C1835	1-126-934-11	C,ELECTROLYTIC	220UF STD 16V M
					C1837	1-126-934-11	C.ELECTROLYTIC	220UF STD 16V M
C1219	9-939-390-01	C,PP C,CERAMIC(HIGH I	MELEA	200V 0 022UF K	C1837	1-126-940-11	C,ELECTROLYTIC	330UF STD 25V M
C1221 C1222	1-102-157-00 1-126-952-11	C.ELECTROLYTIC	JIELE)	1000UF STD 16V M			<diode></diode>	
C1300	1-162-306-11	C,TUBULA(HIGH D	IELE)	001MF 16V M	i I		<pre>CHODE></pre>	
C1301	1-106-371-00	C,POLYESTER(MYI	LAR)	0 015MF 100V K	D1302	8-719-300-33	DIODE	TVR06J 0 6A/600V 250NS
C1202	1-124-903-11	C,ELECTROLYTIC		IUF KU 50V M	D1304	8-719-300-33	DIODE	RU-2MV
C1302 C1303	1-106-367-00	C,POLYESTER(MYI	AR)	0 01U 100V K	D1305 D1307	8-719-815-85 8-719-815-85	DIODE DIODE	1\$2471 1\$2471
C1304	1-106-367-00	C,POLYESTER(MYI		001U 100V K	D1308	8-719-815-85	DIODE	1S2471
C1305	1-106-385-00	C,POLYESTER(MYI	LAR)	0 0560UF 100V J	! !			i a dia dia dia dia dia dia dia dia dia
C1306	1-126-943-11	C,ELECTROLYTIC		2200UF STD 25V M	D1405	8-719-300-80	DIODE DIODE	RU-IA V
C1307	1-126-962-11	C,ELECTROLYTIC		3 3UF STD 50V M	D1403	8-719-815-85	DIODE	182471
C1307	9-939-392-01	C,ELECTROLYTIC		3 3UF KU 50V M	D1415	8-719-018-11	DIODE	ESIF
C1308	9-939-291-01	C,POLYESTER(MYI	LAR)	0 1UF S 50V J	D1802	8-719-304-63	DIODE	RM11AV 1 2A/600V 100A
C1310 C1311	1-126-933-11 1-126-969-11	C,ELECTROLYTIC C,ELECTROLYTIC		100UF STD 16V M 220UF STD 50V M	D1803	8-719-300-33	DIODE	GP15J (1 5A/600V)
CISII	1-120 707-11	,			D1803	8-719-300-33	DIODE	TVR06J 0 6A/600V 250NS
C1313	1-102-157-00	C,CERAMIC(HIGH	DIELE)		D1805	8-719-300-33	DIODE	TVR06J 0 6A/600V 250NS
C1314 C1317	1-126-952-11 1-126-967-11	C,ELECTROLYTIC C,ELECTROLYTIC		1000UF STD 35V M 47UF STD 50V M	D1806	8-719-300-33	DIODE	TVR06J 0 6A/600V 250NS EH-1ZV
C1317	1-126-967-11	C,POLYESTER(MYI	LAR)	0 0033U 100V K	D1807	8-719-300-70	DIODE	EH-12 V
C1410	1-107-618-11	C,CERAMIC(HIGH		180P 500V K	D1809	8-719-300-33	DIODE	RU3AMV
~		C CED LA MOMICIA	CARRY EN	2200DE 500V V	D1810	8-719-961-04	DIODE	RGP10J
C1411	1-164-646-11	C,CERAMIC(HIGH	DIELE)	2200PF 500V K	D1811 D1812	9-908-006-01 8-719-961-04	DIODE DIODE	FML-G12S RGP10J
O3433	<u> </u>			16000 0 0000 0000	D1812	9-908-006-01	DIODE	FML-G12S
C1414	1-165-127-11	C,CERAMIC(HIGH	DŒLE	470PF 500V K	i			
C3435	&9939-382-01	CXEP		2004-0-3005-1	D1814	8-719-961-04	DIODE	RGP10J
C1416	1-126-772-11	C,ELECTROLYTIC		1UF STD 250V M	D1816 D1817	8-719-300-33 8-719-300-33	DIODE DIODE	TVR06J 0 6A/600V 250NS TVR06J 0 6A/600V 250NS
C1417	1-126-967-11	C,ELECTROLYTIC		47UF STD 50V M	D1818	8-719-815-85	DIODE	1S2471
C1419	9-939-393-01	C,ELECTROLYTIC		250V 4 7UF T HR (85)	D1819	8-719-815-85	DIODE	1S2471
C1420	9-909-475-01	C,CERAMIC(HI-K)	288283333	2200PF 2KV	D1820	8-719-815-85	DIODE	1S2471
	44.000 000 7.00000	E	*********		D1820	8-719-815-85	DIODE	1S2471 1S2471
CINN	Δ>+>>	CARTAL POLYES	10W	AC LOSS BORNES	D1824	8-719-304-63	DIODE	RM11AV 1 2A/600V 100A
900000000000000000000000000000000000000	A++++20-01			AND BOOKING W	D1825	8-719-304-63	DIODE	RM11AV 1 2A/600V 100A
C1802 C1803	9-939-284-01 9-939-284-01	CAPACITOR CAPACITOR		CV B 2200PF K CV B 2200PF K	D1826	8-719-304-63	DIODE	RM11AV 1 2A/600V 100A
C1803	9-939-284-01	CAPACITOR		KV B 2200PF K	D1828	8-719-300-33	DIODE	TVR06J 0 6A/600V 250NS
					D1829	8-719-815-85	DIODE	1S2471
C1805	9-939-284-01	CAPACITOR	11	KV B 2200PF K 450V 220UF M	D1830	8-719-815-85	DIODE	182471
C1806 C1807	9-939-420-01 1-136-539-11	C,ELECTROLYTIC C,POLYPROPYLEN	ΙĖ	800V 0 0022MF J	D1831	8-719-815-85	DIODE	1S2471
C1808	1-164-645-11	C,CERAMIC(HIGH		1000PF 500V K	ZD1304		DIODE ZENER	MTZ7.58
C1809	1-124-667-11	C,ELECTROLYTIC		10UF STD 100V M	2013/59	\$ 19 983 30	COOKE ZENER	8812308
C1810	1-104-665-11	C,ELECTROLYTIC		100UF STD 25V M	201399		DESERVED	9177.00 9177.88
C1810	1-104-005-11	C,ELECTROLITIC		220UF STD 16V M		8-719-982-03	DIODE ZENER	MTZ3 6B
C1812	1-165-127-11	C,CERAMIC(HIGH		470PF 500V K	1	5 . 12 202 05	_ 10	
C1813	1-164-646-11	C,CERAMIC(HIGH	DIELE			8-719-109-97	DIODE ZENER	MTZ 11B
C1814	1-124-667-11	C,ELECTROLYTIC		10UF STD 100V M	ZD1815	8-719-921-80	DIODE ZENER	MTZ 11B

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
	8-719-921-49	DIODE ZENER	MTZ 11B	Q1816	8-729-281-53	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC
	8-719-921-80 8-719-982-03	DIODE ZENER DIODE ZENER	MTZ 11B MTZ3 6B	Q1817 Q1818	8-729-206-81 8-729-281-53	TRANSISTOR TRANSISTOR	KTA968A-Y KEC KTC3198-TP-Y (KTC1815)KEC
	8-719-110-41	DIODE,ZENER	MTZ15B TP ROHM	Q1850	8-729-037-08	TRANSISTOR	KTD2058-Y KEC
	8-719-982-26	DIODE ZENER	MTZ 33B			<rela< td=""><td>Y></td></rela<>	Y>
ZD1850	8-719-110-41	DIODE,ZENER	MTZ15B TP ROHM				
		<ferrite< td=""><td>CORE></td><td></td><td></td><td>RELAY</td><td></td></ferrite<>	CORE>			RELAY	
FB1301	1 - 412-911-11	CORE	FERRITE BFD3565R2F			<resist< td=""><td></td></resist<>	
		CORE	FERRITE LUH			/MESIS I	
	1-408-105-00	CORE	FERRITE 1UH		1-217-418-00	R,FUSIBLE	0 47 1/2W 5 0 47 1/2W 5
FB1802 FB1803	1-408-105-00 1-412-911-11	CORE CORE	FERRITE 1UH FERRITE BFD3565R2F	FR!315		R.FUSIBLE	327 3232
	1-412-911-11	CORE	FERRITE BFD3565R2F		1-217-198-01	R,FUSIBLE	0 68 2W 5%
		<fusi< td=""><td>r_</td><td>(20V)</td><td>9-909-899-01</td><td>R,FUSIBLE</td><td>1 60 2W 5%</td></fusi<>	r_	(20V)	9-909-899-01	R,FUSIBLE	1 60 2W 5%
	*			FR1423	1-217-418-00	R,FUSIBLE	0 47 1/2W 5
	11 13 70 70 W	FIGE FIGE	235 44 TB8E LAG	FR1428	1-260-100-11	R,FUSIBLE	1 2K 1/2W 5
		700E	NOCOC (250 464) NOCOC (250 464)		1-260-100-11 1-260-100-11	R,FUSIBLE R,FUSIBLE	1 2K 1/2W 5 1 2K 1/2W 5%
F1804	9-939-294-01	FUSE	MICRO 125V 4 0A	FR1810	1-212-982-00	R,FUSIBLE	100 1/2W 5%
		<ic></ic>		FR1827	1-217-198-01	R,FUSIBLE	0 68 2W 5%
				1	1-249-478-11	R,FUSIBLE R,FUSIBLE	1/2W 2 2 J
IC1301 IC1801	9-939-297-01 8-749-924-XX		ΓΑ8445K 12S 2 2A R/G+V OUT STR/S6707(LF953) 9P (R5.R6)	FR1838	9-939-460-01	R,FUSIBLE	1 0 2W 5%
	5			(20V)	1-217-198-01	R,FUSIBLE	0 68 2W 5%
1018884	\$2,000 to or	RESHARP	POSTORIA DI PROTO COMPLEX	R1215	9-933-000-01	R,CARBON FILM	4 91K 1/2W 5
IC18842	\$8.749.928.89	XCSANKEN	STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL STEEL ST	R1217	1-249-433-11	R,CARBON FILM	
IC1806	9-939-302-01	IC,KEC	KIA7806PI TO-220IS 6V,1A	R1235 R1247	1-249-435-11 1-260-124-11	R,CARBON FILM R,CARBON FILM	
IC1807	9-939-303-01		KIA7812PI 3P(TO-220IS) 12V,1A	(20V)	9-933-000-01	R,CARBON FILM	
IC1809	9-939-303-01	IC,KEC	KIA7812PI 3P(TO-220IS) 12V,1A	l I D1201	1 240 424 11	D CADDON EILA	4 3 9K 1/6W 5
		<coii< td=""><td>Ĺ></td><td>R1301 R1302</td><td>1-249-424-11 1-247-842-11</td><td>R,CARBON FILM R,CARBON FILM</td><td></td></coii<>	Ĺ>	R1301 R1302	1-249-424-11 1-247-842-11	R,CARBON FILM R,CARBON FILM	
000000000000000000000000000000000000000	A. C. C. C. C. C. C. C. C. C. C. C. C. C.	C SE	NATURE CONTRACTOR	R1304	1-249-428-11	R,CARBON FILM	1 8 2K 1/6W 5
£3 *82 £1403	9-939-317-01	COIL	CHOKE 6800UH K 1218	R1306 R1307	1-215-428-00 1-247-860-11	R,METAL FILM R,CARBON FILM	2K 1/6W 5 4 16K 1/6W 5
L1404	1-410-514-11	INDUCTOR,	27UH K	K1307	1-247-000-11	K,CARBON FILM	7 10K 1/0W 3
L1701	9-939-319-01	COIL.	CHOKE 82UH R1217	R1308	9-939-594-01	R,METAL FILM	15K 1/6W 1%
1,18011.)	8,000,000,000	CON.	\$	R1310	1-249-484-11 1-249-484-11	R,CARBON FILM R,CARBON FILM	
L1803	9-939-319-01	COIL	CHOKE 82UH R1217	R1312	9-939-407-01	R,METAL FILM	OXIDE 560 1/2W 5
	<u>k</u> anan m	TRANSFORMER FRE	RESERVED TO THE RESERVED TO TH	R1313	9-939-407-01	R,METAL FILM	OXIDE 560 1/2W 5
200		787	PER SHIP STORY	R1315	1-260-099-11	R,CARBON FILM	
	A 9 9 99 4 14 91	TRANSFORME	SMISCON CHARGE STREET	R1320	1-247-848-11	R,CARBON FILM	
		<connec< td=""><td>CTOR></td><td>R1323 R1324</td><td>9-910-999-31 1-214-862-00</td><td>R,CARBON FILM R,CARBON FILM</td><td></td></connec<>	CTOR>	R1323 R1324	9-910-999-31 1-214-862-00	R,CARBON FILM R,CARBON FILM	
P1401A	9-939-325-01			(20V)	1-247-754-11	R,CARBON FILM	M 1 5K 1/2W 5
	\$9-939-343-01		SSY 10P (L=300) TO MA P1401B	R1325	1-260-072-11	R,CARBON FILM	M 47 1/2W 5
	9-939-328-01		SSY 12P(L=300) TO MA P1803B	R1405	1-249-436-11	R,CARBON FILM	M 39K 1/6W 5
P1804	9-939-403-01	CONNECTOR AS	SSY 1P 200MM TO MA P1101	R1411	1-215-891-11		OXIDE 680 2W 5% M 3 3K 1/2W 5
		<transis< td=""><td>STOR></td><td>R1413</td><td>1-260-105-11 1-259-036-11</td><td>R,CARBON FILM R,CARBON FILM</td><td></td></transis<>	STOR>	R1413	1-260-105-11 1-259-036-11	R,CARBON FILM R,CARBON FILM	
Q1401	8-729-232-26	TRANSISTOR	KTC1027-Y(KTC2235),KEC	R1415	1-260-097-11	R,CARBON FILM	
(20V)	9-936-295-01	TRANSISTOR	KTC3229(KTC2068),KEC	R1416	1-249-657-11	R.METAL FILM	OXIDE 220 1/2W 5
Q1402	9-939-593-01	TRANSISTOR	KTD2499	******	1.048-417-11	R CARBON FILE	A 188 1899 5
(20V) Q1801	8-729-821-87 8-729-025-04	TRANSISTOR TRANSISTOR	2SD1878 2SC3852A SANKEN) (2000) 1 R1421	9-939-595-01	R,METAL FILM	2 2K 1/2W 5
Ø1001	J , 22 OLD OT			(20V)	1-249-377-11	R,METAL FILM	0 68 1/2W 5
Q1802	8-729-206-81	TRANSISTOR	KTA968A-Y KEC	 D1406	1 240 412 11	D CARRON EU I	v4 470 1/6W 5
Q1803 Q1804	8-719-803-82 8-729-281-53		KTC3228-0 TP(KTC2383),KEC KTC3198-TP-Y (KTC1815)KEC	R1426	1.249-413.11	R.CARBON FILE	iki kalaban kalaban kalaban kalaban kalaban kalaban kalaban kalaban kalaban kalaban kalaban kalaban kalaban ka
Q1805	8-719-803-82		KTC3228-0 TP(KTC2383),KEC		<u> </u>	X CARBOX FILE	4 56 18 0 5
Q1806	8-729-281-53	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC		1-247-838-00	R CARBON FELT	
Q1807	8-729-281-53	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	i			
Q1808	8-729 - 281-53		KTC3198-TP-Y (KTC1815)KEC	R1803	1-215-875-11		OXIDE 10K 1W 5% M 1 8K 1/6W 5
Q1809	8-729-201-53	TRANSISTOR	KTA1266-TP-Y (KTA1015) KEC	R1804	1-249-420-11 1-249-417-11	R,CARBON FILE R,CARBON FILE	
Q1810 Q1811	8-729-281-53 8-729-140-96		KTC3198-TP-Y (KTC1815)KEC KTC3227-Y,TP(KTC1627A),KEC	R1807	9-939-336-01	R,METAL FILM	OXIDE 20 2W 5%
61011	U-127-14U-7U	IMMODION	RICOLLI I,II (RICIOLIA),REC	R1808	9-908-989-01	R,PRW	2W 0 22 OHM J
Q1812	8-729-281-53		KTC3198-TP-Y (KTC1815)KEC		Lever or m	86.500.000	E R. 130 (18
Q1813	8-729-281-53	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	R1811	1-249-421-11	R,METAL FILM	2 2K 1/4W 2 OXIDE 10 1W 5%
Q1814 Q1815	8-719-803-82	TRANSISTOR	KTC3228-0 TP(KTC2383),KEC	R1812 R1813	1-215-857-11 1-215-902-11		OXIDE 10 1W 3% OXIDE 47K 1W 5%
				I i			

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
R1814 R1815	1-260-099-11 1-247-271-00	R,CARBON FILM R,CARBON FILM	1 0K 1/2W 5 20K 1/2W 5	R1907 R1908	1-249-419-11 1-247-754-11	R,CARBON FILM R,CARBON FILM	1 5K 1/6W 5 1 5K 1/2W 5
R1816 R1817	1-249-437-11 1-249-425-11	R,CARBON FILM R,CARBON FILM	47K 1/6W 5 47K 1/6W 5	R1909 R1910	1-247-754-11 1-247-754-11	R,CARBON FILM R,CARBON FILM	1 5K 1/2W 5 1 5K 1/2W 5
R1818	1-249-429-11	R,CARBON FILM	10K 1/6W 5	R1911	1-216-463-00	R,METAL FILM OXID	
R1819	1-259-454-11	R,CARBON FILM	12K 1/6W 5	 	. 216 462 00	DAGENI EUMOVID	NE 121/2W/80
R1820	1-249-421-11	R,CARBON FILM	2 2K 1/6W 5	R1912 R1913	1-216-463-00 1-216-463-00	R,METAL FILM OXID R,METAL FILM OXID	
R1821	1-249-422-11	R,CARBON FILM	2 7K 1/6W 5	R1914	1-202-846-11	R,CARBON FILM	470K 1/2W 5
R1822	1-249-423-11	R,CARBON FILM R.CARBON FILM	3 3K 1/6W 5 10K 1/6W 5	R1915	1-202-838-11	R,CARBON FILM	100K 1/2W 5
R1823 R1824	1-249-429-11 1-249-425-11	R,CARBON FILM	47K 1/6W 5	R1916	1-202-848-11	R,CARBON FILM	680K 1/2W 5
R1825	1-249-425-11	R,CARBON FILM	47K 1/6W 5	R1917	1-249-731-11	R,CARBON FILM	270K 1/2W 5
D1006	1 207 672 00	D DW DECT C	5W 2 2 J DOUBLE	R1918 R1919	1-214-921-00 1-249-405-11	R,CARBON FILM R,CARBON FILM	220K 1/2W 5 100 1/6W 5
R1826 R1829	1-207-672-00 1-249-427-11	R,RW RECT G R,CARBON FILM	6 8K 1/6W 5	1	1-249-403-11		RH0638CN2R0PB B331
R1830	1-249-429-11	R,CARBON FILM	10K 1/6W 5	VR1902	1-241-760-11	R,HORI	RH0638CN2R0PB B331
R1831	1-249-429-11	R,CARBON FILM	10K 1/6W 5	VD 1002	1-241-763-11	D HODI	RH0638CS3R2HB B472
R1832	9-939-412-01	R,CARBON FILM	1 6K 1/2W 5		1-241-763-11		RH0638CS3R2HB B472
R1833	1-249-425-11	R,CARBON FILM	47K 1/6W 5		1-241-763-11		RH0638CS3R2HB B472
R1834	1-249-425-11	R,CARBON FILM	4 7K 1/6W 5		1-230-641-11 1-230-641-11	•	RH092GDJ6J1AA(2 2M) RH092GDJ6J1AA(2 2M)
R1835 R1836	1-249-432-11 1-249-433-11	R,CARBON FILM R,CARBON FILM	18K 1/6W 5 22K 1/6W 5	VK1908	1-230-041-11	K,HOKI	RH092GDJ0J (AA(2 ZW)
R1837	1-260-111-00	R,CARBON FILM	10K 1/2W 5		*	9-939-364-01 RP MOUN	T COMPLETE
D1000	0.010.000.01	D CARRON ET M	150 1/034 5	!			1 COMILLIE
R 1838	9-910-999-31 ******* 396-8	R.CARBON FILM	150 1/2W 5	į			
R1840	9-939-412-01	R,CARBON FILM	1 6K 1/2W 5	I I		<capacito< td=""><td>R></td></capacito<>	R>
R1843	1-259-454-11	R,CARBON FILM	12K 1/6W 5	C701	1-124-455-00	C,ELECTROLYTIC	100UF 16V M
R1844	1-249-406-11	R,CARBON FILM	120 1/6W 5	C701	9-939-289-01	C,TUBULA(HIGH DIE	
R1845	1-249-429-11	R,CARBON FILM	10K 1/6W 5	C703	1-162-306-11	C,TUBULA(HIGH DIE	
R1846	1-249-429-11	R,CARBON FILM	10K 1/6W 5	C704 C705	1-126-301-11 1-162-306-11	C,ELECTROLYTIC C,TUBULA(HIGH DIE	1UF 50V M ELE) 0 01MF 16V M
R1849 R1850	1-259-418-11 1-259-418-11	R,CARBON FILM R,CARBON FILM	390 1/6W 5 390 1/6W 5		1 102 300 11	0,10000,111011211	322)
211000		MISCELLANEC		C709	1-162-306-11	C,TUBULA(HIGH DIE	•
	•	MISCELLANEC	108>	C710 C711	1-162-306-11 1-162-306-11	C,TUBULA(HIGH DIE C,TUBULA(HIGH DIE	
	9-908-991-01	andri francia a de la desambante de la transferancia de la companya de la companya de la companya de la company	SVC P12T21	C712	1-162-306-11	C,TUBULA(HIGH DIF	ELE) 001MF 16V M
				C713	1-162-306-11	C,TUBULA(HIGH DIE	ELE) 001MF 16V M
				C714	1-162-306-11	C,TUBULA(HIGH DI	ELE) 001MF 16V M
	* 9-93	9-461-01 C MOUNT COM	PLETE (13V)	C717	1-162-306-11	C,TUBULA(HIGH DIE	
	9-93	9-358-01 C MOUNT COM	PLETE (20V)	C718 C719	1-162-306-11 1-162-306-11	C,TUBULA(HIGH DIE C,TUBULA(HIGH DIE	
		********	::::	C720	1-162-306-11	C,TUBULA(HIGH DI	•
				C723	1-162-600-11	C,TUBULA(HIGH DII	ELE) 4700PF 16V X
		<capacitor< td=""><td>></td><td>C723</td><td>1-162-217-31</td><td>C,TUBULA(TC)</td><td>56P 50V J</td></capacitor<>	>	C723	1-162-217-31	C,TUBULA(TC)	56P 50V J
C1901	1-162-292-31	C,TUBULA(HIGH DIEL	.E) 680P 50V K	C732	1-162-215-31	C,TUBULA(TC)	47PF 50V J
C1902		C,TUBULA(HIGH DIEI		C733	1-162-288-31 1-162-284-31	C,TUBULA(HIGH DII C,TUBULA(HIGH DII	
C1903 C1904	1-162-292-31 1-136-203-11	C,TUBULA(HIGH DIEJ C,POLY PROPYLNE	E) 680P 50V K 0 01 630V	1	1 102 20 . 31	0,10202,1(11011211	1001 001 11
(20V)	9-904-475-01	C,CERAMIC(HI-K)	2200PF 2KV	C735	1-162-219-31	C,TUBULA(TC)	68P 50V J ELE) 001MF 16V M
		<diode></diode>		C736	1-162-306-11	C,TUBULA(HIGH DII	ELE) OUIMF 16V M
D1907	8-719-815-85		S2471	1		<ic></ic>	
D1907 D1908	8-719-815-85		52471 52471	IC701	1-810-534-11	IC,SANYO	LA7416 30SD 4HD AMP(VCR)
D1909	8-719-815-85	DIODE 13	32471	į		<inductor< td=""><td>?></td></inductor<>	?>
		<connecto< td=""><td>R></td><td>L701</td><td>1-410-521-11</td><td>INDUCTOR</td><td>100UH K</td></connecto<>	R>	L701	1-410-521-11	INDUCTOR	100UH K
P1501		CONTROL CONT	8P TO MA P1501-A	L731	1-410-508-11	INDUCTOR	8 2UH K
	9-939-326-01	CONNECTOR ASSY		L732	1-410-513-11	INDUCTOR	22UH K
P1504	9-939-326-01 9-939-402-01	CONNECTOR ASSY CONNECTOR ASSY	4P (L=250) TO D P1504-A		1-410 520 11	INDIICTOD	
P1504		CONNECTOR ASSY	4P (L=250) TO D P1504-A	L733 L734	1-410-520-11 9-939-322-01	INDUCTOR INDUCTOR	82UH K 270UH K
	9-939-402-01	CONNECTOR ASSY	4P (L≈250) TO D P1504-A	L733		INDUCTOR	270UH K
Q1901 Q1902		CONNECTOR ASSY	4P (L=250) TO D P1504-A	L733 L734	9-939-322-01	INDUCTOR <resistor< td=""><td>270UH K</td></resistor<>	270UH K
Q1901	9-939-402-01 9-936-295-01	CONNECTOR ASSY	4P (L≈250) TO D P1504-A R> KTC3229 (KTC2068),KEC	L733 L734 R701	9-939-322-01 9-939-413-01	INDUCTOR <resistor film<="" r,carbon="" td=""><td>270UH K \$> 75K 1/6W 5</td></resistor>	270UH K \$> 75K 1/6W 5
Q1901 Q1902	9-939-402-01 9-936-295-01 9-936-295-01	CONNECTOR ASSY <transistoi td="" transistor="" transistor<=""><td>4P (L≈250) TO D P1504-A R R KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC</td><td>L733 L734</td><td>9-939-322-01</td><td>RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM</td><td>270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5</td></transistoi>	4P (L≈250) TO D P1504-A R R KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC	L733 L734	9-939-322-01	RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM	270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5
Q1901 Q1902 Q1903	9-939-402-01 9-936-295-01 9-936-295-01 9-936-295-01	CONNECTOR ASSY <transistoi <resistor:<="" td="" transistor=""><td>4P (L≈250) TO D P1504-A R> KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC</td><td>L733 L734 R701 R703 R704 R723</td><td>9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11</td><td>RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM</td><td>270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5</td></transistoi>	4P (L≈250) TO D P1504-A R> KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC	L733 L734 R701 R703 R704 R723	9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11	RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM	270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5
Q1901 Q1902 Q1903 R1901	9-939-402-01 9-936-295-01 9-936-295-01 9-936-295-01 1-249-404-11	<pre>CONNECTOR ASSY</pre>	4P (L≈250) TO D P1504-A R KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC 82 1/6W 5	L733 L734 R701 R703 R704	9-939-322-01 9-939-413-01 1-249-433-11 1-249-433-11	RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM	270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5
Q1901 Q1902 Q1903 R1901 R1902 R1903	9-939-402-01 9-936-295-01 9-936-295-01 9-936-295-01 1-249-404-11 1-247-812-11 1-247-812-11	CONNECTOR ASSY <transistor **resistor**="" film="" film<="" r,carbon="" td="" transistor=""><td>4P (L≈250) TO D P1504-A R RTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC 82 1/6W 5 160 1/6W 5 160 1/6W 5</td><td>L733 L734 R701 R703 R704 R723 R731</td><td>9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11 1-249-413-11 1-249-414-11</td><td>RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM</td><td>270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5 470 1/6W 5 560 1/6W 5</td></transistor>	4P (L≈250) TO D P1504-A R RTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC 82 1/6W 5 160 1/6W 5 160 1/6W 5	L733 L734 R701 R703 R704 R723 R731	9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11 1-249-413-11 1-249-414-11	RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM	270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5 470 1/6W 5 560 1/6W 5
Q1901 Q1902 Q1903 R1901 R1902 R1903 R1904	9-939-402-01 9-936-295-01 9-936-295-01 9-936-295-01 1-249-404-11 1-247-812-11 1-247-812-11	CONNECTOR ASSY <transistor **resistor**="" film="" film<="" r,carbon="" td="" transistor=""><td>4P (L≈250) TO D P1504-A R RTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC 82 1/6W 5 160 1/6W 5 160 1/6W 5 160 1/6W 5</td><td>R701 R703 R704 R723 R731 R732 R733</td><td>9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11 1-249-413-11 1-249-414-11 1-249-419-11</td><td>RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM</td><td>270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5 470 1/6W 5 1 5K 1/6W 5</td></transistor>	4P (L≈250) TO D P1504-A R RTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC 82 1/6W 5 160 1/6W 5 160 1/6W 5 160 1/6W 5	R701 R703 R704 R723 R731 R732 R733	9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11 1-249-413-11 1-249-414-11 1-249-419-11	RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM	270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5 470 1/6W 5 1 5K 1/6W 5
Q1901 Q1902 Q1903 R1901 R1902 R1903	9-939-402-01 9-936-295-01 9-936-295-01 9-936-295-01 1-249-404-11 1-247-812-11 1-247-812-11	CONNECTOR ASSY <transistor **resistor**="" film="" film<="" r,carbon="" td="" transistor=""><td>4P (L≈250) TO D P1504-A R RTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC 82 1/6W 5 160 1/6W 5 160 1/6W 5</td><td>L733 L734 R701 R703 R704 R723 R731</td><td>9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11 1-249-413-11 1-249-414-11</td><td>RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM</td><td>270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5 470 1/6W 5 560 1/6W 5</td></transistor>	4P (L≈250) TO D P1504-A R RTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC KTC3229 (KTC2068),KEC 82 1/6W 5 160 1/6W 5 160 1/6W 5	L733 L734 R701 R703 R704 R723 R731	9-939-322-01 9-939-413-01 1-249-433-11 1-249-435-11 1-249-413-11 1-249-414-11	RESISTOR R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM	270UH K 75K 1/6W 5 20K 1/6W 5 20K 1/6W 5 33K 1/6W 5 470 1/6W 5 560 1/6W 5

REMARK

REF NO	PART NO	DESCRIPTION		REMARK	REF NO	PART NO	DESCRIPTION
	*	* 9-939-365-01 MF LEFT	MOUNT COMPLETE		1		
		<capacito< td=""><td>R></td><td></td><td>}</td><td></td><td></td></capacito<>	R>		}		
C01	1-126-786-11	C,ELECTROLYTIC	47UF 16V M		 		
		<led></led>) 		
D01 D02 D03	9-939-397-01 9-939-397-01 9-939-397-01	DIODE,LED DIODE,LED DIODE,LED	DL-11S2RN1 OPT DL-11S2RN1 OPT DL-11S2RN1 OPT	O'	 		
		<pre-ami< td=""><td>'></td><td></td><td>1</td><td></td><td></td></pre-ami<>	' >		1		
RC01	9-939-332-01	PRE-AMP	ORC-40S				
		<resistoi< td=""><td>{></td><td></td><td></td><td></td><td></td></resistoi<>	{>				
R85 R86 R87 R88	1-249-420-11 1-249-427-11	R,CARBON FILM R,CARBON FILM R,CARBON FILM R,CARBON FILM	3 3K 1/6W 5 1 8K 1/6W 5 6 8K 1/6W 5 18K 1/6W 5	5 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		<switch< td=""><td>></td><td></td><td></td><td></td><td></td></switch<>	>				
SW6 SW7 SW8 SW9 SW10	1-572-200-11 1-572-200-11 1-572-200-11 1-572-200-11 1-572-200-11	SWITCH SWITCH *** * 9-939-367-01 MF RIGH	TACT 2LEAD HOR TACT 2LEAD HOR TACT 2LEAD HOR TACT 2LEAD HOR TACT 2LEAD HOR TACT 2LEAD HOR	E I I I			
		<resisto< td=""><td></td><td>•</td><td></td><td></td><td></td></resisto<>		•			
701	1 240 410 11			e e	1		
R81 R82 R83 R84	1-249-418-11 1-249-420-11 1-249-423-11 1-249-427-11	R,CARBON FILM R,CARBON FILM	1 2K 1/6W 1 8K 1/6W 3 3K 1/6W 6 8K 1/6W	5 5	 		
		<switch< td=""><td>></td><td></td><td>i 1 1</td><td></td><td></td></switch<>	>		i 1 1		
SW1 SW2 SW3 SW4 SW5	1-572-200-11 1-572-200-11 1-572-200-11 1-572-200-11 1-572-200-11	SWITCH SWITCH SWITCH SWITCH SWITCH	TACT 2LEAD HOR TACT 2LEAD HOR TACT 2LEAD HOR TACT 2LEAD HOR TACT 2LEAD HOR	iI iI iI	 		
		<accessor< td=""><td>IES></td><td></td><td> ! !</td><td></td><td></td></accessor<>	IES>		 ! !		
A1 A1 A2 A2 A3	9-939-214-01 9-939-215-01 1-473-626-11 1-473-626-21 9-908-072-01	INSTUCTION MANU INSTUCTION MANU REMOTE CONTROL REMOTE CONTROL ADAPTER,ANT	JAL (ENG/FRN) LER(RM-Y138)				